



# **DRAFT**

## **ENVIRONMENTAL ASSESSMENT**

**MESAROS RANCH BUGLE  
ALTERNATIVE LIVESTOCK OPERATION  
CASCADE COUNTY, MONTANA**

STATE DOCUMENTS COLLECTION

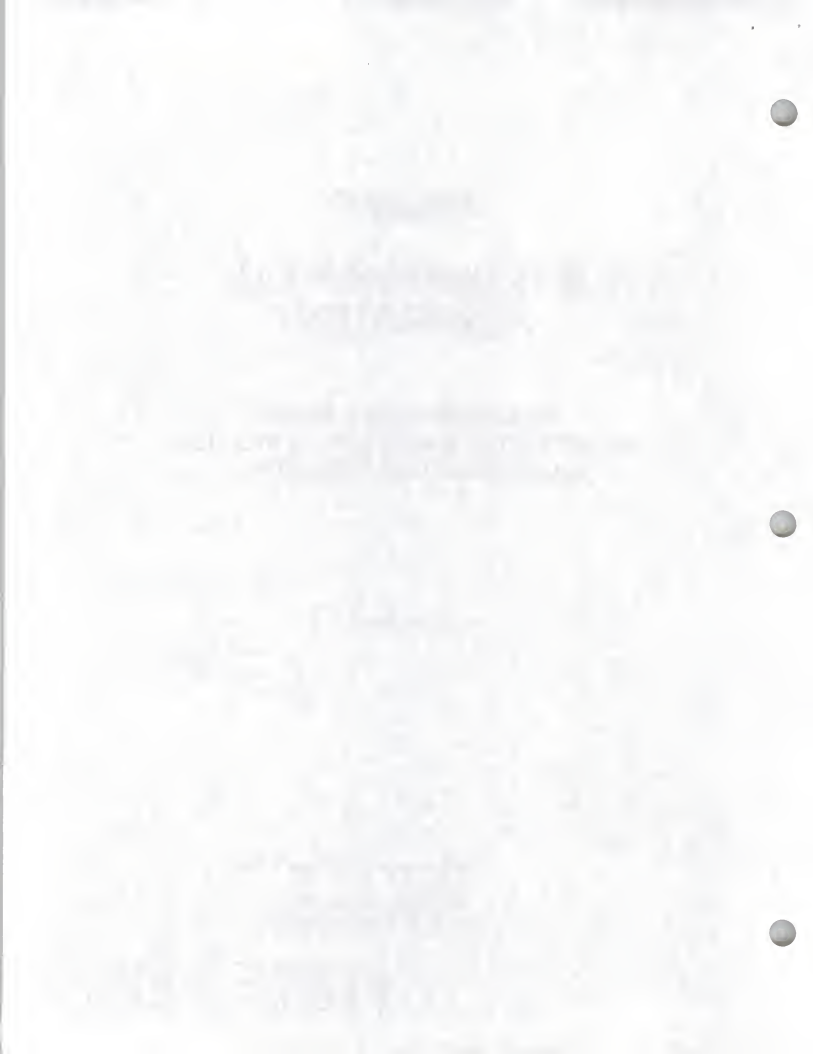
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# TABLE OF CONTENTS

	<u>Page</u>
<b>SUMMARY</b> .....	1
INTRODUCTION .....	1
OBJECTIVES .....	1
PUBLIC PARTICIPATION .....	2
PROPOSED ACTION AND ALTERNATIVES .....	2
PURPOSE AND NEED OF THE PROPOSED ACTION .....	5
ROLE OF FWP AND DOL .....	5
AFFECTED ENVIRONMENT .....	6
ENVIRONMENTAL CONSEQUENCES .....	10
EA CONCLUSION .....	12
STIPULATIONS AND MITIGATION MEASURES .....	12
<b>PART I. ALTERNATIVE LIVESTOCK LICENSE APPLICATION INFORMATION</b> .....	15
<b>PART II. ENVIRONMENTAL REVIEW</b> .....	18
EA DEFINITIONS .....	18
PHYSICAL ENVIRONMENT .....	
Land .....	19
Air .....	21
Water .....	23
Vegetation .....	26
Fish and Wildlife .....	29
HUMAN ENVIRONMENT .....	
Noise Effects .....	33
Land Use .....	34
Risk/Health Hazards .....	36
Community Impact .....	40
Public Services/Taxes .....	41
Aesthetics/Recreation .....	42
Cultural and Historical Resources .....	43
Summary .....	44
SUMMARY EVALUATION OF SIGNIFICANCE .....	46
<b>PART III. NARRATIVE EVALUATION AND COMMENT</b> .....	48
<b>PART IV. EA CONCLUSION</b> .....	50

## FIGURES

<b>FIGURE 1</b> Mesaros Ranch Alternative Livestock - Site Map .....	3
<b>FIGURE 2</b> Mesaros Ranch Alternative Livestock - Land Use/Land Cover .....	4
<b>FIGURE 3</b> Mesaros Ranch Alternative Livestock - Land Ownership .....	7
<b>FIGURE 4</b> Mesaros Ranch Alternative Livestock - Big Game Distribution .....	9

## APPENDIX

### APPENDIX A

### PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST



## **SUMMARY**

### **DRAFT ENVIRONMENTAL ASSESSMENT PROPOSED MESAROS RANCH BUGLE ALTERNATIVE LIVESTOCK OPERATION**

#### **INTRODUCTION**

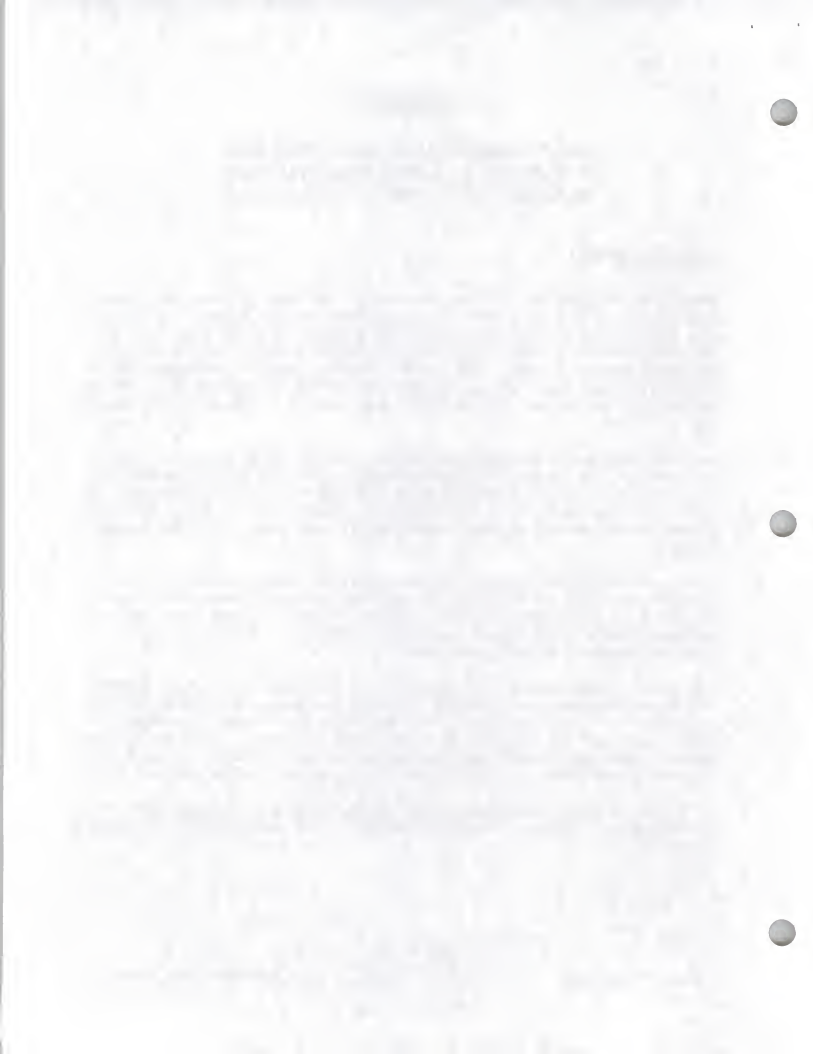
Montana Fish, Wildlife & Parks (FWP) is required to perform an environmental analysis in accordance with the Montana Environmental Policy Act (MEPA) for each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment (Administrative Rules of Montana [ARM] 12.2.430). FWP uses environmental assessments (EAs) in the alternative livestock (i.e., game farm) licensing process to identify and evaluate environmental impacts of a proposed alternative livestock operation. EAs also determine whether the impacts would be significant and whether, as a consequence, FWP would perform a more detailed environmental impact statement (EIS).

The people of Montana, through our legislature, have determined that the alternative livestock industry is appropriate in Montana. It is understood that this carries with it some risk that cannot be reduced to zero. The level of risk that a particular project may introduce must be evaluated by FWP (through the MEPA process) using legislative intent, the negotiated rules and standards therein, as well as established practices that have been demonstrated to be sufficiently effective measures for similar conditions elsewhere.

When preparing an EA, FWP reviews environmental impacts of the Proposed Action, impacts of the No Action Alternative, and impacts of other alternative actions which include recommended and/or mandatory measures to mitigate the project's impacts. A mitigated EA includes alternatives with enforceable requirements (stipulations) which reduce impacts of the Proposed Action. The EA may also recommend a preferred alternative for the FWP decision maker.

This EA also provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A.

This EA is prepared for the proposed new Mesaros Ranch Bugle Alternative Livestock site located near Cascade, Montana. Based upon its review of the alternative livestock application, FWP has prepared a mitigated EA.



## OBJECTIVES

This EA has been prepared to serve the following purposes in accordance with FWP MEPA rules (ARM 12.2.430):

- ensure that FWP uses natural and social sciences in planning and decision making;
- to be used in conjunction with other agency planning and decision-making procedures to make a determination regarding the Proposed Action;
- assist in the evaluation of reasonable alternatives and the development of conditions, stipulations, and modifications to the Proposed Action;
- determine the need to prepare an EIS through an initial evaluation and determination of the significance of impacts associated with the Proposed Action;
- ensure fullest appropriate opportunity for public review and comment on the Proposed Action; and
- examine and document likely effects of the Proposed Action on the quality of the human environment.

## PUBLIC PARTICIPATION

Public involvement in the EA process includes steps to identify and address public concerns. The Draft EA will be available for public review and comment from October 22, 1999 until 5 pm November 12, 1999 from the Region 4 FWP office. No public meeting currently is planned; however, a meeting may be scheduled by FWP based on public request on a timely basis. Comments regarding this EA should be submitted to FWP at the location specified below:

Mr. Mike Aderhold, Regional Supervisor  
Fish, Wildlife & Parks, Region 4  
4600 Giant Springs Road  
Great Falls, Montana 59406  
Phone: (406) 454-5840

## PROPOSED ACTION AND ALTERNATIVES

### PROPOSED ACTION

The Montana FWP received an initial application dated July 25, 1999 from Kenneth and Rebecca Mesaros to develop an alternative livestock operation in Cascade County, Montana (Figures 1 and 2). FWP accepted the application as complete in a letter to Ken and Rebecca Mesaros dated August 4, 1999. The proposed Mesaros Ranch Bugle Alternative Livestock Operation would place up to 400 head of elk (bulls and cows) on a year-round basis on 500 acres of land leased from Albert Mesaros. The site is located approximately 15 miles east of the town of Cascade near the Smith River valley. Mr. and Mrs. Mesaros live adjacent to the proposed alternative livestock site. Purposes of the Proposed Action include: breeding stock, meat and antler production, and to cull mature bull elk for profit through controlled shooting by clients who desire trophy elk.

5-1-72

Friday

From 10:00 am to 12:00 pm

at the University of California

at the University of California

at the University of California

at the University of California

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at the University of California

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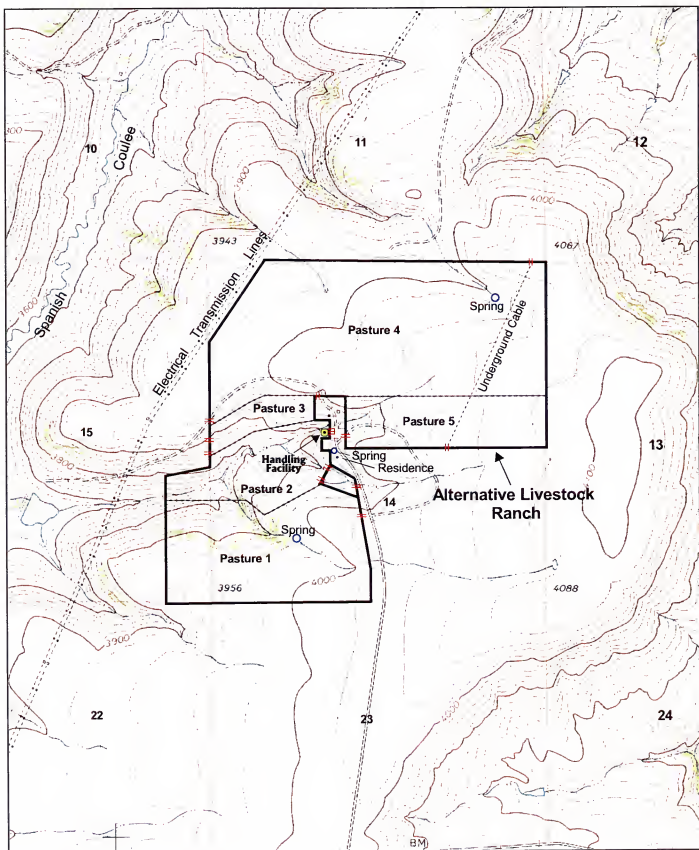
at the University of California

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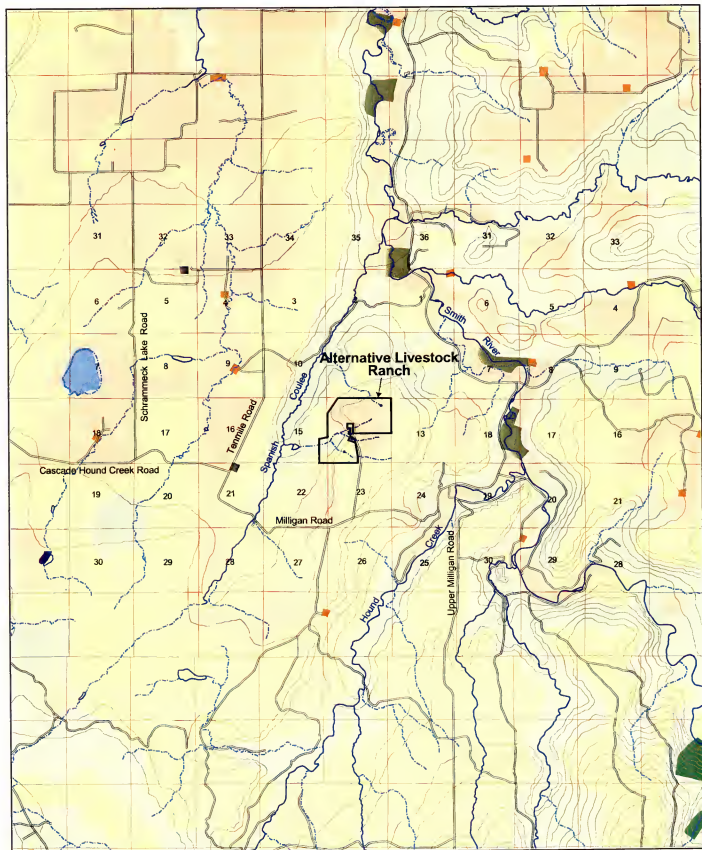


- Several Gates
- Gate
- Fence - Exterior
- Fence - Interior (approximate location)

Topographic Base Derived From  
USGS 1:24,000 Scale Maps.

**Site Map**  
**Mesaros Ranch Bugle**  
**Proposed Alternative Livestock EA**  
**Cascade County, Montana**  
**FIGURE 1**





0 Miles 1.5

Note: Land Use and Base  
Data Derived From US  
Bureau Of Land Management  
1:250,000 Scale Maps,  
US Census Bureau 1:100,000  
Scale TIGER Line Files.  
Contours Derived From 90 Meter USGS  
DEMs. Contour Interval 100 Feet.

- Crop / Pasture
- Other Agriculture
- Grass Rangeland
- Mixed Rangeland
- Evergreen Forest
- Mixed Forest
- Wetland
- Reservoir
- Mine / Quarry

**Land Use / Land Cover**  
**Mesaros Ranch Bugle**  
**Proposed Alternative Livestock EA**  
**Cascade County, Montana**  
**FIGURE 2**



Several perimeter fence gates would be constructed for the 500-acre alternative livestock site (Figure 1) and would remain latched or locked, except for when alternative livestock are moved into or out of the enclosure, at which time the gates would be monitored to prevent ingress of wild game or egress of domestic elk. Several additional internal gates would allow movement of alternative livestock between the planned five internal pastures and the quarantine facility. Wild animals, if any, would be removed from the enclosure prior to issuance of the license by FWP.

Cattle would be allowed to graze on pastures adjacent to the proposed alternative livestock site. Some of Mesaros' domestic pregnant cows would be allowed to give birth to the calves and recover in a portion of the enclosure (Pasture 2) during part of the winter and early spring (i.e., February, March, and part of April); typically, about 100 to 150 cows/calves would be in the enclosure at any given time. Both cattle and alternative livestock would be allowed controlled access to the pond on the east side of the facility, although the alternative livestock would not be allowed to intermingle with domestic cattle.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. Alternative livestock fencing would consist of 8-foot high, high-tensile, tightlock woven wire game fence. All exterior fence bottoms must be installed to provide not more than 3 inches of ground clearance. Mr. Mesaros has requested that FWP approve a waiver for modifying the fence design for approximately 300 feet where an existing fence is in-place. Locations of interior fences shown on Figure 1 are preliminary and may be modified as the various pasture enclosures are constructed.

An elk handling and quarantine facility would be constructed in an existing metal barn that would be included within the exterior fence of Pasture 2 (Figure 1). The elk handling and quarantine facility would be constructed to meet DoL standards. The metal barn would continue to be used for domestic cow calving operations from late winter through early spring. Elk calving may be conducted inside the metal barn after the completion of cow calving.

## **ALTERNATIVES**

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for the proposed Mesaros Ranch Bugle Alternative Livestock Operation as proposed. Therefore, no alternative livestock would be placed in the proposed fenced enclosure. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place at the proposed alternative livestock site. The site may continue as cattle pasture if the No Action Alternative were selected by FWP.

## **PURPOSE AND NEED OF THE PROPOSED ACTION**

The Mesaros Ranch Bugle Alternative Livestock Operation would be a private commercial enterprise that would provide for breeding stock, meat and antler production, and to cull mature bull elk for profit through controlled shooting by clients who desire trophy elk.

## **ROLE OF FWP AND DEPARTMENT OF LIVESTOCK**

Montana FWP is the lead agency in preparing this EA for the proposed project. This document is written in accordance with the Montana Environmental Quality Council (EQC) MEPA Handbook and FWP statutory requirements for preparing an EA under Title 75, Chapter 1, Part 2 Montana Code Annotated (MCA) and FWP rules under ARM 12.6.1520. Alternative livestock regulations are presented in 87-4-406 et seq., MCA, and ARM 12.6.1520 et seq.



The FWP has primary jurisdiction over alternative livestock operations with regards to licensing, reports and record-keeping, exterior fencing, and enforcement (87-4-408(1), MCA). FWP shares regulatory responsibilities for new and expanding alternative livestock operations with the Montana Department of Livestock (DoL) (87-4-408(2), MCA). The DoL is responsible for regulating the health, transportation and identification of alternative livestock. During the application process, all quarantine area plans and specifications are submitted to the DoL for approval.

## **AFFECTED ENVIRONMENT**

The proposed Mesaros Ranch Bugle Alternative Livestock Operation is located on land leased from Albert Mesaros. The site is located about 15 miles east of the town of Cascade in Cascade County. This section summarizes primary environmental resources in the project area.

### **LAND RESOURCES**

The proposed alternative livestock site is located on the footslopes of the Big Belt Mountains. The ranch is situated on a gently sloping upland terrace and moderately steep slopes within the headlands of several ephemeral coulees that drain west to Spanish Coulee. Current land use is rangeland and dry land cropping. The site lies at an elevation of about 4,000 feet above mean sea level. Some state-owned land occurs within 2-4 miles of the proposed alternative livestock site (Figure 3).

Surficial geology of the site and vicinity is composed of Cretaceous-age Kootenai and Colorado formations. The gently sloping upland terrace is underlain by sandstone. Rocks present in the headland coulees within the proposed site include sandstone, shale, and siltstone. Three soil units have been mapped in the area of the proposed game alternative livestock site. These map units include the Castner complex (2-15% slopes), the Sinnigam loam (0-4% slopes), and the Bitton and Roy soils (10-65% slopes).

### **WATER RESOURCES**

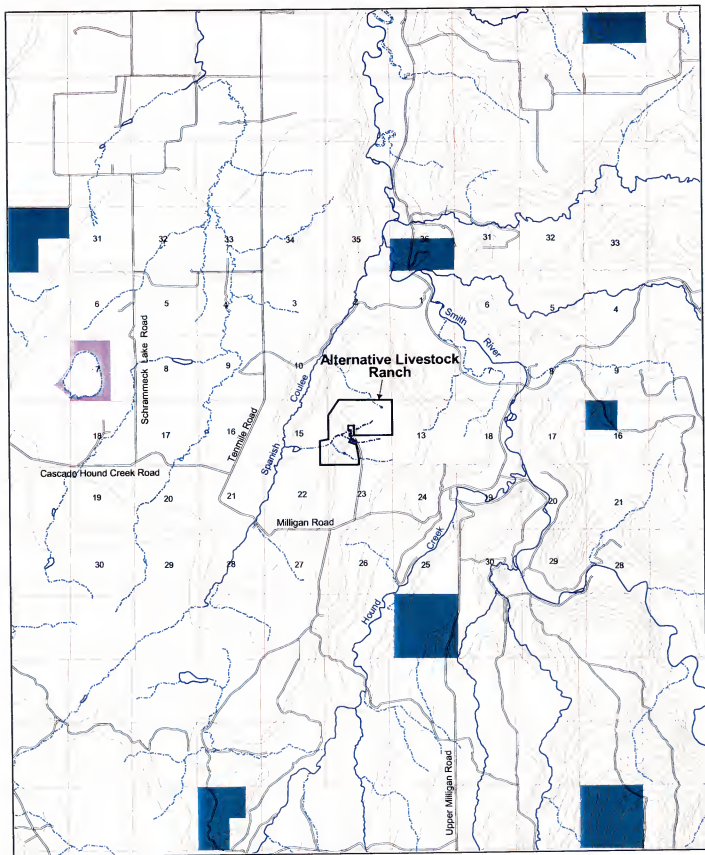
The proposed alternative livestock ranch is situated on a westward sloping upland area which is bounded by Hound Creek and the Smith River on the east, and by Spanish Coulee on the west. Snowmelt and precipitation runoff from the site flows to Spanish Coulee through several unnamed coulees. Discharge from three springs flow through the proposed enclosure area. An impoundment located immediately south of the residence would be included within the perimeter fence of the facility. A larger impoundment is located farther downstream in the drainage, approximately 0.4-mile west of the facility. Runoff from the site entering Spanish Coulee would flow northeast approximately 3-miles before entering the Smith River. The nearest well identified during a search of well records is located 1.5 miles southeast of the site near Hound Creek. The topographic map for the site identifies one spring 0.5-mile northeast of the site and one spring 0.75-mile southeast of the site.

### **VEGETATION RESOURCES**

The site is comprised of native rangeland (357 acres; 71%) and dry cropland (143 acres; 29%). This site is currently used to winter cattle, pasture horses, and grow wheat. Rangeland vegetation is located on relatively level ridge tops and moderately inclined slopes along several unnamed coulees that drains west to Spanish Coulee. The proposed alternative livestock operation could potentially produce 732,500 pounds of forage annually. There are no federally-listed threatened or endangered plant species expected to occur within the proposed alternative livestock site. This area does contain suitable habitat for noxious weeds such as leafy spurge, Canada thistle, and mullen.







0 Miles 1.5

Note: Land Ownership and Base Data  
Derived From US Bureau Of Land  
Management 1:100,000 Scale Maps,  
US Census Bureau 1:100,000 Scale  
TIGER Line Files.  
Contours Derived From 90 Meter USGS  
DEMs. Contour Interval 100 Feet.

State Land  
National Wildlife Refuge

Land Ownership  
Mesas Ranch Bugle  
Proposed Alternative Livestock EA  
Cascade County, Montana  
FIGURE 3

MAXIM

9731687.480



## WILDLIFE RESOURCES

The proposed alternative livestock site and surrounding land represent moderate to good quality pronghorn antelope habitat. Over 1,200 pronghorn use a broad area surrounding the proposed site as year-long range (Figure 4). There is no identified pronghorn winter habitat or migration corridor in the alternative livestock enclosure area. Both mule deer and white-tailed deer occur in the proposed alternative livestock area. Due to the lack of extensive tree and shrub cover, this area is considered low density deer habitat with less than three deer per square mile.

Over 2,000 elk winter in the Big Belt Mountains south of the alternative livestock site. The wintering area represents about 225 square miles of wintering habitat with elk density being approximately 10 elk per square mile; however, elk density near the perimeter of the area would be less (Figure 4). Elk on occasion are reported to travel through the grassland habitat in the vicinity of the project site. The riparian corridor of the Smith River valley is also considered to be moose wintering habitat, but not including the proposed alternative livestock site (Figure 4).

This area supports upland game bird populations. One covey of pheasant was observed at the ranch headquarters during the site visit, and sharp-tailed grouse and gray partridge are present in this area. Mountain lions and black bears are present in the Big Belt Mountains to the southeast of the proposed alternative livestock site and east of the Smith River. An occasional lion or bear would be expected to pass through the area. This area is used by migratory bald eagles and peregrine falcons (federally-listed bird species). No other federally-protected species are expected to occur in this area.

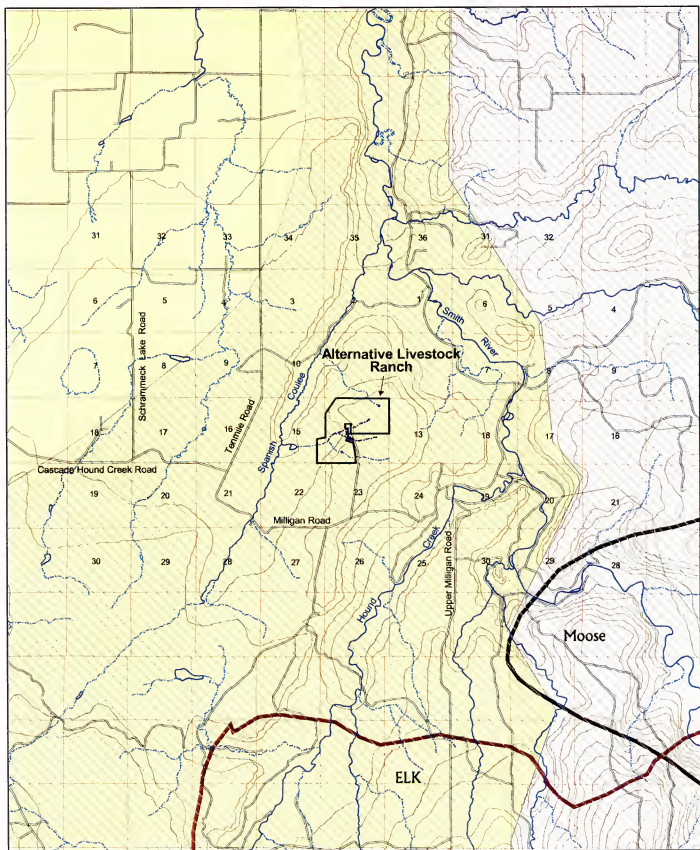
## LAND USE/COMMUNITY

Land surrounding the proposed alternative livestock site is cropland and pasture grazed by cattle and horses (Figure 2). The Smith River (1½-2 miles east) receives public fishing and boating use. Some public state land occurs within 2-4 miles of the site (Figure 3). Public lands in the general area typically are leased by local ranchers for agricultural use and are occasionally used by local residents for recreational purposes (mostly hunting and fishing). Several county roads extend around the alternative livestock site at distances of about 1-2 miles (Figure 3). The nearest residences are located approximately 1-2 miles east-southeast of the site along Hound Creek and the Smith River.

## RISK/HEALTH HAZARDS

Two currently monitored diseases -- brucellosis and tuberculosis -- are potentially transmittable between alternative livestock, cattle, horses, and wildlife. Domestic livestock are currently pastured on adjacent rangeland and pastureland. Though never detected in Montana, chronic wasting disease (CWD) has been detected in alternative livestock and free-ranging deer and elk in other states or provinces. However, the mode of transmission is unknown and there is no test for this disease in living animals. CWD has been a known wildlife disease for 20 years in Colorado and Wyoming. There is no evidence of CWD transmission to domestic livestock or humans. Shooting activities at the proposed alternative livestock facility also are of possible concern with respect to human health and safety.





0 Miles 1.5

**MAXIM**

9731687.480

Note: Wildlife Data From Jim Williams,  
FWP biologist and Montana FWP  
1:100,000 And 1:250,000 Scale Maps.  
Base Data Derived From US Census  
Bureau 1:100,000 Scale TIGER Line  
Files And 1:100,000 Scale US BLM Maps.  
Contours Derived From 90 Meter USGS DEMs.  
Contour Interval 100 Feet.

- Pronghorn Antelope  
General Range
- Mule Deer General and  
Winter Range
- Moose General Range
- Elk General and  
Winter Range

**Big Game Distribution  
Mesaros Ranch Bugle  
Proposed Alternative Livestock EA  
Cascade County, Montana  
FIGURE 4**



## ENVIRONMENTAL CONSEQUENCES

Only primary resources that have potential adverse effects from the Proposed Action are summarized in this section. A detailed discussion of environmental consequences is contained in *Part II* of this EA.

### LAND RESOURCES

The proposed alternative livestock site would likely have only minor impacts on land and soil resources. Unprotected soil may be easily eroded by water if left unprotected, especially on steeper slopes present in the unnamed coulees that drain to Spanish Coulee. Removal of vegetation due to overuse (either overgrazing or trampling) is the primary threat to leaving the soil unprotected.

### WATER RESOURCES

Increased runoff and erosion could occur in some areas of the ranch if the stocking rate exceeds the carrying capacity of the pasture, and vegetative cover is diminished. The proposal to pasture up to 400 elk on the 500-acre site with supplemental feed available could result in maintenance of adequate vegetative cover if proper management practices are utilized; however, the maximum density is relatively high and could cause erosion problems. Alternative livestock fecal matter and nutrient-enriched water may have minor impacts on the quality of groundwater and surface water in the vicinity of the ranch, primarily during periods of snow melt and major precipitation events. Nutrients in runoff from the site could potentially enter Spanish Coulee and ultimately the Smith River. The impoundment in the unnamed coulee immediately west of the proposed alternative livestock site would moderate this effect.

### VEGETATION RESOURCES

The occupancy period for the adult elk would be on a year-long basis. Annual forage consumption for 400 adult elk would be approximately 1,606,000 pounds of forage. The proposed alternative livestock site would supply only about 46% of annual forage needs of the elk when fully stocked. The maximum proposed stocking rate is considered high and probably would contribute to the long-term decline of vegetation resources both in terms of plant species composition and productivity of the site. Supplemental feed would be required to sustain the elk during the non-growing season and feed should be provided during the growing season to help reduce elk use on native vegetation.

Additionally, some of Mesaros' domestic pregnant cows would be allowed to give birth and recover in a portion of the enclosure (Pasture 2; 47 acres) during February, March, and part of April. Typically, about 100 to 150 cows/calves would be in the enclosure at any given time. Although cattle have traditionally wintered here and the vegetation is already impacted by cattle, the additional use of this pasture by elk during the remainder of the year would further impact the vegetation. Without special management, it may be difficult to maintain vegetative cover in Pasture 2.

Leafy spurge and Canada thistle are present at this site and could potentially spread under the proposed intensive grazing. In addition, disturbed areas around the quarantine and handling facilities, or where elk are fed, would provide an opportunity for weeds to become established. Weed seeds could potentially be imported into the area with feed for the elk.





## **WILDLIFE RESOURCES**

The proposed alternative livestock site is not located within any identified critical big game winter range, nor is it located along a migration corridor. The area is year-long deer and pronghorn habitat. Up to 100 pronghorn and 50 mule deer have been sighted in the vicinity of the site during some winters. However, these animals are not confined to this area by topographic features or by unique habitats, and they do not travel along a specific route into or out of this area. An occasional elk may pass through this area. The exclusion of wild pronghorn and deer from 500 acres would displace pronghorn and deer from moderate to good quality habitat. This may impact the individual survivorship of a few of pronghorn and deer, but it is not likely to significantly impact the overall pronghorn and deer population in the general area. The Proposed Action would not impact any threatened or endangered species.

Immediately west of the alternative livestock site at the mouth of the unnamed coulee that bisects the site is a 10-acre impoundment that would likely contain much of the run-off when it occurs from the alternative livestock site. This reservoir is stocked with fish and they have survived with run-off from the cattle wintering operation at the head of the drainage. The addition of 400 elk into this drainage basin may lower water quality in the reservoir.

## **LAND USE/COMMUNITY**

The proposed alternative livestock ranch would be compatible with existing agricultural land uses. The Proposed Action would result in the loss of about 143 acres of dry cropland. The alternative livestock site is currently used to winter cattle, pasture horses, and grow wheat. With respect to land use, no significant conflicts should result between operation of the alternative livestock site and the agricultural or residential areas. Some hunting area previously used by the public may be lost because of the enclosure. Potential effects of the Proposed Action on adjacent property values are difficult to evaluate because some nearby property owners may like an alternative livestock ranch, whereas others would find it undesirable.

## **RISK/HEALTH HAZARDS**

There is a minor potential for water-borne disease pathogens, if present, to be transported out of the alternative livestock site because surface water seldom leaves the enclosure. One pond and flow from three springs would be included in the enclosure; however, water from these sources generally does not flow out of the proposed enclosure area, except during runoff periods of significant snowmelt and/or precipitation. The impoundment in the unnamed coulee west of the proposed alternative livestock site would capture runoff from the enclosure. Excessive accumulation of manure may occur on Pasture 2 due to its dual use by cattle and elk. There is a potential for E.coli bacteria levels in runoff water to become elevated. However, the general lack of surface water flow out of the proposed alternative livestock site, as well as alternative livestock disease testing requirements, results in a minor potential for disease transmission via water movement. The route of chronic wasting disease (CWD) transmission at this time is unknown; therefore, the potential for transmission by soil, water or other media cannot be determined.

Two currently monitored diseases -- brucellosis and tuberculosis -- are potentially transmittable between alternative livestock, cattle, and horses. Domestic livestock are currently pastured on adjacent rangeland and pastureland, and there would be potential for significant impacts if contact between domestic livestock and alternative livestock (elk) resulted in the transfer of disease. There is also potential for significant impacts if alternative livestock (elk) carry or become infected with a contagious wildlife disease or parasite such as tuberculosis, and then come in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. Potential for disease transmission between domestic elk, cattle, and wildlife is partially mitigated through DoL disease testing and FWP fencing requirements.



The release of a contagious disease in the wild could significantly impact more than neighboring deer or elk since they are capable of moving considerable distances on a seasonal basis. It is also possible diseases and parasites carried by wild deer or elk could be introduced to the alternative livestock.

If tuberculosis or brucellosis were present and subsequently transmitted from alternative livestock to wild elk, hunters field dressing wild elk would be subject to significant risk of infection. Veterinarians and meat cutters working with diseased alternative livestock are at risk of becoming infected with brucellosis or tuberculosis. Risk to human health from diseased animals could be significant, but routine brucellosis and tuberculosis testing requirements for alternative livestock offer a measure of surveillance that minimizes that risk. Failure to comply with these requirements may present grounds for license revocation.

The nearest residences are located approximately 1 to 2 miles east-southeast of the proposed alternative livestock site along the bottomlands of Hound Creek and Smith River. County roads are located approximately 1 to 2 miles around the site. Public land (state-owned) in the vicinity of the alternative livestock site is located 2 to 4 miles from the site. The county roads, residences, and some public land are within average maximum ranges of high-powered big game rifles (i.e., 1.5 to 3 miles or more). As a result, a potential exists for significant injury to residents or travellers in the area. However, numerous variables must be considered to determine actual lethal potential of a rifle bullet at distance, and topography (i.e., coulees, hills, and valleys) would provide some protection from bullets used at the alternative livestock operation.

## **CUMULATIVE EFFECTS**

The Proposed Action would result in potential impacts that are individually minor, but not cumulatively significant. Due to the sparsely populated area in the vicinity of the proposed alternative livestock site, no cumulative impacts to wildlife or habitat are expected. Cumulative effects are described for each resource in Part II (Environmental Review) of this EA.

## **EA CONCLUSION**

MEPA and alternative livestock statutes require FWP to conduct an environmental analysis for alternative livestock licensing as described in the *Introduction* of this *Summary* section (p. 1). FWP prepares EAs to determine whether a project would have a significant effect on the environment. If FWP determines that a project would have a significant impact that could not be mitigated to less than significant, the FWP would prepare a more detailed EIS before making a decision.

Based on the criteria evaluated in this EA, an EIS would not be required for the proposed Mesaros Ranch Bugle Alternative Livestock Operation. The appropriate level of analysis for the Proposed Action is a mitigated EA because all impacts of the Proposed Action have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none.

## **STIPULATIONS AND MITIGATION MEASURES**

The stipulations and mitigation measures described in this section address both significant and minor impacts associated with the proposed Mesaros Ranch Bugle Alternative Livestock Operation. FWP would require stipulations to mitigate all potentially significant impacts resulting from the Proposed Action. Potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended to remain in compliance with state and federal environmental laws, but are not required.



## REQUIRED STIPULATIONS

The following stipulations are imposed by FWP for the Mesaros Ranch Bugle Alternative Livestock Operation and are designed to mitigate significant impacts identified in the EA to below the level of significance:

- (1) *Inspect the exterior alternative livestock fence and document its condition on a weekly basis and immediately after events likely to damage the fence to insure its integrity with respect to trees, burrowing animals, predators and other game animals. Should ingress of wildlife or egress of alternative livestock during winter become a problem, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress.*
- (2) *A guide or representative of the ranch must accompany each shooter to be sure shooting does not occur toward nearby residences (those located within approximately 1 mile of the enclosure).*

The first stipulation is imposed to mitigate a potentially significant risk from ingress/egress and the resulting potential contact with domestic livestock and/or wildlife because of potential fence integrity problems. Risk to livestock and wildlife from contact with alternative livestock is potentially significant due to the site being located in an area currently utilized by domestic livestock and wild game. The second stipulation is imposed to mitigate a potentially significant risk to public health and safety due to the proximity of some residences to the alternative livestock operation. The requirement to have a guide with each alternative livestock shooter to be sure shooting does not occur toward nearby residences would reduce the chances of impacting human health/safety.

## RECOMMENDED MITIGATION MEASURES

The following list of selected recommended mitigation measures address minor impacts identified in the Mesaros Ranch Bugle Alternative Livestock EA; for a complete list of all mitigation measures, see the following check-list portion of this EA:

- Maintain a reasonable stocking rate within the alternative livestock enclosures to minimize changes in soil structure and potential increases in erosion from disturbed ground. A "reasonable stocking rate" is defined under "EA Definitions" on the first page of Part II in this EA. It is difficult to establish a numerical "reasonable" stocking rate prior to implementation of the Proposed Action due to variable site conditions and the use of supplemental elk feed.
- Dust management activities include vegetating exposed ground where possible, protecting fill piles from wind erosion, and limiting ground disturbance to only the area necessary to complete the job.
- Employ the following best management practices (BMPs) to reduce odor problems if they occur: (1) incorporate waste into soil quickly by plowing or discing; (2) spread waste during cool weather or in the morning during warm, dry weather; and (3) properly dispose of animal carcasses. Carcasses should not be disposed of in or adjacent to water bodies, roads, and ditches.
- Maintain a reasonable stocking rate in the area to mitigate potential impacts from runoff and fecal matter. Potential water quality impacts also could be minimized by disposing dead animals, gut piles, and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste).



- For any areas that may have erosion and sedimentation problems, utilize best management practices (BMPs) where surface water could drain directly to Spanish Coulee. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.
- Where the perimeter fence crosses the bottom of the main drainage on the west side, a culvert should be placed that has suitable capacity to handle spring runoff, and fill should be placed over the culvert to reduce the steepness of the slopes at this point. The culvert should be equipped with a grate to prevent ingress/egress.
- Monitor the proposed alternative livestock site for invasion of noxious weeds and treat affected areas in a timely manner. Should noxious weeds continue to be detected, a weed control program should be implemented to control the weeds, if not already in-place.
- Provide supplemental feed and minerals to the elk on a year-long basis to reduce excessive grazing on preferred pasture plants.
- Store hay, feed, and salt away from exterior fences or enclose in bear-resistant containers or buildings.
- Feed alternative livestock at interior portions of the enclosure and not along the perimeter fence.
- Remove dead animals, excess fecal material, and waste feed from the alternative livestock site and deposit at an approved site not likely to be used by humans, and domestic and wild animals.
- If fence integrity or ingress/egress becomes a problem, adjustment of fence requirements to include double fencing, internal fencing, electrification, or increased height may become necessary.
- During winters of exceptional snow cover, removal of snow on either side of the enclosure fence may be required to prevent ingress and egress.
- Escort persons into and out of the alternative livestock perimeter fence who may need to access the underground cable under the easement agreement to assure that a gate is not inadvertently left open.
- If wild bull elk and domestic bull elk fight through the perimeter fence during the rut, develop an interior pasture where domestic bull elk could be contained during the rut to prevent damage to the fence.
- If archeological artifacts are observed during construction of the alternative livestock fence or from other activities, work should stop in the area and the discovery reported to the Montana Historical Society, Historic Preservation Office, in Helena.







## PART I. ALTERNATIVE LIVESTOCK LICENSE APPLICATION

### ***ENVIRONMENTAL ASSESSMENT CHECKLIST***

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Montana Fish, Wildlife & Park's authority to regulate alternative livestock sites is contained in sections 87-4-406 through 87-4-424, MCA and ARM 12.6.1501 through 12.6.1544.

1. **Name of Project:** Mesaros Ranch Bugle Alternative Livestock Operation

**Date of Acceptance of Completed Application:** August 4, 1999

2. **Name, Address and Phone Number of Applicant(s):**

Kenneth & Rebecca Mesaros  
2191 Millegan Road  
Cascade, Montana 59421  
406-866-3318

3. **If Applicable:**

**Estimated Construction/Commencement Date:** September 1, 1999

**Estimated Completion Date:** September 1, 2002

**Is this an application for expansion of existing facility or is a future expansion contemplated?**

No, this application is for a new alternative livestock facility; an expansion has not been contemplated in the application beyond the proposed 500-acre enclosure.

4. **Location Affected by Proposed Action (county, range and township):**

Cascade County, 500 acres in the following:  
Section 14 & 15; Township 17 North, Range 2 East

5. **Project Size:** Estimate number of acres that would be directly affected that are currently:

(a) Developed:	(d) Floodplain.....	acres
residential.....		acres
industrial.....	(e) Productive:	
	irrigated cropland.....	acres
(b) Open Space/Woodlands/Areas.....	dry cropland.....	143 acres
	forestry.....	acres
(c) Wetlands/Riparian Areas.....	rangeland.....	356 acres
	other.....	acres
		1 acres



**6. Map/site plan:**

The following maps are included in the introductory summary of this EA:

- Figure 1:** Site Map
- Figure 2:** Land Use / Land Cover
- Figure 3:** Land Ownership
- Figure 4:** Big Game Distribution

**7. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action:**

The Montana FWP received an initial application dated July 25, 1999 from Kenneth and Rebecca Mesaros to develop an alternative livestock operation in Cascade County, Montana. FWP accepted the application as complete in a letter to Ken and Rebecca Mesaros dated August 4, 1999. The proposed Mesaros Ranch Bugle Alternative Livestock Operation would place up to 400 head of elk (bulls and cows) on a year-round basis on 500 acres of land leased from Albert Mesaros. The site is located approximately 15 miles east of the town of Cascade near the Smith River valley. Mr. and Mrs. Mesaros live adjacent to the proposed alternative livestock site. Purposes of the Proposed Action include: breeding stock, meat and antler production, and to cull mature bull elk for profit through controlled shooting by clients who desire trophy elk.

Several perimeter fence gates would be constructed for the 500-acre alternative livestock site and would remain latched or locked, except for when alternative livestock are moved into or out of the enclosure, at which time the gates would be monitored to prevent ingress of wild game or egress of domestic elk. Several additional internal gates would allow movement of alternative livestock between the planned five internal pastures and the quarantine facility. Wild animals, if any, would be removed from the enclosure prior to issuance of the license by FWP. Cattle would be allowed to graze on pastures adjacent to the proposed alternative livestock site. Some of Mesaros' domestic pregnant cows would be allowed to give birth to the calves and recover in a portion of the enclosure (Pasture 2) during part of the winter (i.e., February, March, and part of April); typically, about 100 to 150 cows/calves would be in the enclosure at any given time. Both cattle and alternative livestock would be allowed controlled access to the pond on the east side of the facility, although the alternative livestock would not be allowed to intermingle with domestic cattle.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. Alternative livestock fencing would consist of 8-foot high, high-tensile, tightlock woven wire game fence. All exterior fence bottoms must be installed to provide not more than 3 inches of ground clearance. Mr. Mesaros has requested that FWP approve a waiver for modifying the fence design for approximately 300 feet where an existing fence is in-place. Locations of interior fences shown on Figure 1 are preliminary and may be modified as the various pasture enclosures are constructed.

An elk handling and quarantine facility would be constructed in an existing metal barn that would be included within the exterior fence of Pasture 2. The elk handling and quarantine facility would be constructed to meet DoL standards. The metal barn would continue to be used for cow calving operations from late winter through early spring. Elk calving may be conducted inside the metal barn after the completion of cow calving.



8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:**

(a) **Permits:**

<u>Agency Name</u>	<u>Permit</u>	<u>Approval Date and Number</u>
Department of Livestock	approval of quarantine and handling facility	Pending

(b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
None	

(c) **Other Overlapping or Additional Jurisdictional Responsibilities:**

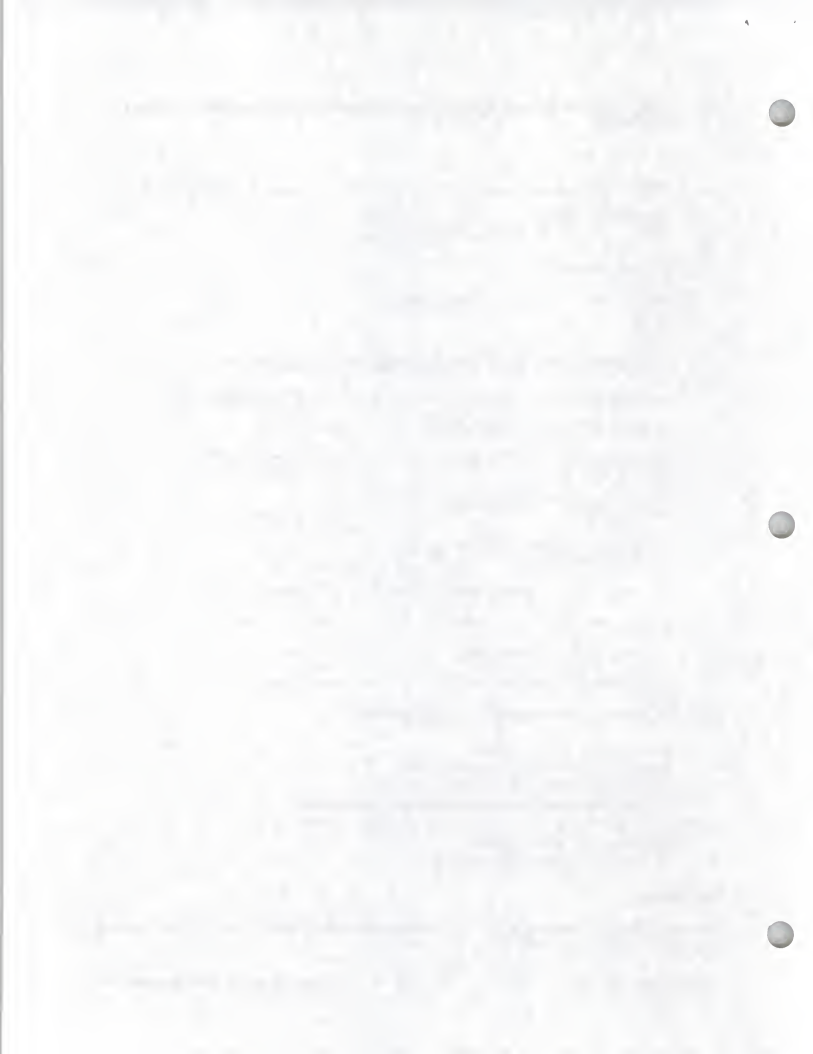
<u>Agency Name</u>	<u>Type of Responsibility</u>
Montana Department of Livestock (DoL)	disease control
Montana Department of Environmental Quality (DEQ)	water quality, air quality waste management
Montana State Historical Preservation Office (SHPO)	cultural resources
Montana Department of Natural Resources and Conservation (DNRC)	water rights
Natural Resource Conservation Service (NRCS)	soil conservation
Cascade County Conservation District	stream crossings
U.S. Army Corps of Engineers (COE)	wetlands
Cascade County Weed Control District	weed control

9. **List of Agencies Consulted During Preparation of the EA:**

Montana Department of Livestock  
Montana Department of Environmental Quality  
Montana State Historical Preservation Office  
Montana Department of Natural Resources and Conservation  
U.S. Department of Agriculture, Natural Resource Conservation Service  
Cascade County Assessors Office  
Cascade County School Superintendent

**REFERENCES:**

Mesaros, Kenneth & Rebecca, July, 1999. Application for Mesaros Ranch Bugle Alternative Livestock Operation, dated July 25, 1999.



## **PART II. ENVIRONMENTAL REVIEW**

This section of the EA presents results of an environmental review of the proposed Mesaros Ranch Bugle Alternative Livestock Operation (Proposed Action). The assessment evaluated direct and indirect impacts and cumulative effects of the Proposed Action on the following resources of the physical environment: land, air, water, vegetation, fish and wildlife; and the following concerns of the human environment: noise, land use, human health risk, community impacts, public services and taxes, aesthetics and recreation, and cultural and historical resources. Impacts were determined to fall in one of four categories: unknown, none, minor and significant. For the purposes of this EA, and in accordance with ARM 12.6.1525, these terms are defined as follows:

### **EA DEFINITIONS**

**Cumulative Effects:** Collective impacts on the physical and human environment of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impacts statement evaluation, or permit processing procedures.

**Unknown Impacts:** Information is not available to facilitate a reasonable prediction of potential impacts.

**Significant Impacts:** A determination of significance of an impact in this EA is based on individual and cumulative impacts from the Proposed Action. If the Proposed Action results in significant impacts that can not be effectively mitigated, FWP must prepare an EIS. The following criteria are considered in determining the significance of each impact on the quality of the human environment:

- severity, duration, geographic extent and frequency of occurrence of the impact;
- probability that the impact would occur if the Proposed Action occurs;
- growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative effects;
- quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- importance to the state and to society of each environmental resource or value that would be affected;
- any precedent that would be set as a result of an impact of the Proposed Action that would commit FWP to future actions with significant impacts or a decision in principle about such future actions; and
- potential conflict with local, state, or federal laws, requirements, or formal plans.

**Reasonable Stocking Rate:** The density of animals appropriate to maintain vegetative cover in pasture condition that minimizes soil erosion from major precipitation events and snowmelt. Factors to consider in determining an overall reasonable stocking rate include vegetation type and density, ground slope, soil type, and precipitation.





## PHYSICAL ENVIRONMENT

1. LAND RESOURCES Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X		Yes	1(b)
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				

## AFFECTED ENVIRONMENT:

The proposed Mesaros Ranch Bugle Alternative Livestock Operation is located on about 500 acres near the footslopes of the Big Belt Mountains in Cascade County, Montana. Cascade, the nearest town, lies about 15 miles to the west. The ranch is situated on a gently sloping upland terrace and moderately steep slopes within the headlands of several ephemeral coulees that drain west to Spanish Coulee. Current land use is rangeland and dry land cropping. The site lies at an elevation of about 4,000 feet above mean sea level.

Surficial geology of the site and vicinity is composed of Cretaceous-age Kootenai and Colorado formations (U.S. Geological Survey (USGS) and Montana Bureau of Mines and Geology (MBMG), 1955). The gently sloping upland terrace is underlain by sandstone. Rocks present in the headland coulees within the proposed site include sandstone, shale, and siltstone.

Three soil units have been mapped by the Natural Resource Conservation Service (formerly known as the Soil Conservation Service) in the area of the proposed game alternative livestock site. These map units include the Castner complex (2-15% slopes), the Sinnigam loam (0-4% slopes), and the Bitton and Roy soils (10-65% slopes) (Soil Conservation Service (SCS), 1982). About 43% of the proposed site lies on Sinnigam loam which is composed of shallow, well-drained soil formed in sandstone. Soil included in this map unit is very stony loam and clay loam that are moderately permeable, have a neutral reaction, and have a slight or moderate hazard of erosion from wind and water.

About one-third of the proposed alternative livestock site is composed of soils included in the Castner complex. These soils are shallow, well-drained, and have formed in material weathered from sandstone. The texture of soil mapped as Castner complex is channery sandy loam and very channery loam. Erosion hazard in the Castner is slight from wind and slight or moderate from water. Bitton and Roy soils are primarily stony loams formed from sandstone parent materials. Surface runoff is medium to rapid due to the steeper slopes where these soils form. Soils in this unit are mildly to moderately alkaline. Erosion hazard is slight from wind and severe from water. All three map units present a high risk of corrosion to uncoated steel (SCS, 1982).



#### **PROPOSED ACTION:**

- 1(b) The proposed alternative livestock site would likely have only minor impacts to land and soil resources. Unprotected soil may be easily eroded by water if left unprotected, especially on steeper slopes present in the unnamed coulees that drain to Spanish Coulee. Removal of vegetation due to overuse (either overgrazing or trampling) is the primary threat to leaving the soil unprotected.

#### **NO ACTION:**

Under the No Action Alternative, the current condition of the property would not likely change.

#### **CUMULATIVE EFFECTS:**

As this area is used for agricultural production, the cumulative effect of using the proposed area as an alternative livestock operation is expected to be slight. The impact on soil in Pasture 2 may be greater because of the cumulative dual use by alternative livestock and domestic cattle. The proposed alternative livestock area does not contain any unique or significant soil or land resources that would be lost due to the proposed land use change.

#### **COMMENTS:**

The high risk of corrosion to uncoated steel should be considered when designing the exterior fence. Uncoated steel posts may corrode with time in these soils.

**Required Stipulations:** None

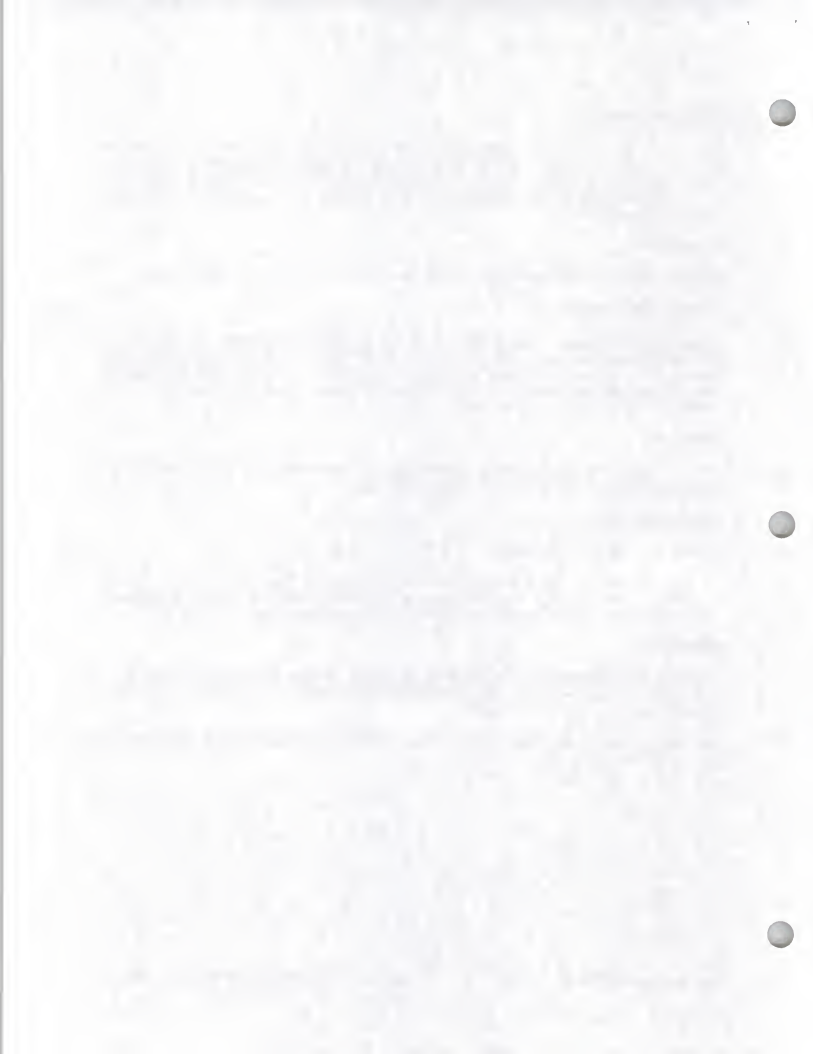
#### **Recommended Mitigation Measures:**

- 1(b). Maintain a reasonable stocking rate within the alternative livestock enclosures to minimize changes in soil structure and potential increases in erosion from disturbed ground. A "reasonable stocking rate" is defined under "EA Definitions" on the first page of Part II in this EA.

#### **REFERENCES:**

**Soil Conservation Service (SCS), U.S. Department of Agriculture, 1982.** Soil Survey of Cascade County Area, Montana. Published in cooperation with the Montana Agricultural Experiment Station. USDA, Washington, D.C., 329 pages with plates.

**U.S. Geological Survey (USGS) and Montana Bureau of Mines and Geology (MBMG), 1955.** Geologic Map of Montana, 1:500,000.



## PHYSICAL ENVIRONMENT

2. <u>AIR</u> Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Emission of air pollutants or deterioration of ambient air quality?			X		Yes	2(a)
b. Creation of objectionable odors?			X		Yes	2(b)
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				

### AFFECTED ENVIRONMENT:

The proposed site is situated in a predominantly farming and ranching area located approximately 15 miles east of the town of Cascade, Montana. County roads generally occur within about 1 to 2 miles on all sides of the proposed alternative livestock site (Figure 3). This area is sparsely populated with no apparent air quality problems, and is not classified for air quality attainment status (Montana Department of Environmental Quality (DEQ), 1997). A couple of residences are located 1-2 miles east-southeast of the site along Hound Creek and the Smith River.

### PROPOSED ACTION:

- 2(a) Fence construction and road use may result in short-term minor increases in particulate matter in ambient air.
- 2(b) Minor odor problems may result from waste management practices in areas where elk concentrate to feed. Odors associated with cattle already in this area would be similar to those the elk may create.

### NO ACTION:

No impacts to air quality are expected to result from the No Action Alternative.

### CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed site are anticipated. Adjacent farming and ranching activities apparently do not cause any obvious air quality problems.

### COMMENTS:

Dust and odor are not expected to be of significant concern at the proposed site due to distances to the relatively sparse population in this area. If dust and/or odor problems arise, mitigation measures can be implemented.



**Required Stipulations:** None

**Recommended Mitigation Measures:**

- 2(a). Dust management activities include vegetating exposed ground where possible, protecting fill piles from wind erosion, and limiting ground disturbance to only the area necessary to complete the job.
- 2(b). Employ the following best management practices (BMPs) to reduce odor problems if they occur: (1) incorporate waste into soil quickly by plowing or discing; (2) spread waste during cool weather or in the morning during warm, dry weather; and (3) properly dispose of animal carcasses. Carcasses should not be disposed of in or adjacent to water bodies, roads, and ditches. These and other BMPs are described in "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ, 1996).

**REFERENCES:**

**Montana Department of Environmental Quality (DEQ), 1997.** Montana Air Quality Non-Attainment Areas. Revised January, 1997.

**Montana DEQ, 1996.** Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.





### PHYSICAL ENVIRONMENT

3. WATER Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		Yes	3(a)
b. Changes in drainage patterns or the rate and amount of surface runoff?			X		Yes	3(a)
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?			X		Yes	3(f)
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?			X		Yes	3(f)
i. Violation of the Montana non-degradation statute?		X				
j. Effects on any existing water right or reservation?		X				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?			X		Yes	3(f)
l. Effects on other water users as a result of any alteration in surface or groundwater quantity?		X				

### AFFECTED ENVIRONMENT:

The proposed alternative livestock ranch is situated on a westward sloping upland area which is bounded by Hound Creek and the Smith River on the east, and by Spanish Coulee on the west (Figure 2). Snowmelt and precipitation runoff from the site flows to Spanish Coulee through several unnamed coulees, the largest of which crosses the southern half of the site (Figure 1). This drainage also receives flow from a developed spring located near the main ranch residence and an undeveloped spring located approximately 0.25-mile to the southwest. An impoundment located immediately south of the residence would be included within the perimeter fence of the facility. A larger impoundment is located farther downstream in the drainage, approximately 0.4-mile west of the facility. Irrigation water from Spanish Coulee is normally cycled through this reservoir during summer, with outflow through an irrigation canal. This reservoir is stocked with fish.

Two smaller tributary drainages to Spanish Coulee drain the northeast and northwest corners of the proposed alternative livestock site (Figure 1). A developed spring is located in the drainage in the northeast corner of the site. The applicant indicates that he plans to construct an impoundment in this northeast drainage (K. Mesaros, pers. comm., 1999). Runoff from the site entering Spanish Coulee would flow northeast approximately 3-miles before entering the Smith River (Figure 3). Several landowners



possess water rights on Spanish Coulee (Montana Department of Natural Resources and Conservation (DNRC), 1999). The Smith River is classified as a low priority for development of a Total Maximum Daily Load (TMDL)(Montana Department of Environmental Quality (DEQ), 1998).

The nearest well identified during a search of well records on-file with the Montana DNRC (1999) is located 1.5 miles southeast of the site near Hound Creek. The well was installed in 1956 and information on its use or construction is not available. The USGS (1971) topographic map for the site identifies one spring 0.5-mile northeast of the site and one spring 0.75-mile southeast of the site. The presence of springs in this upland area suggests that some of the surface moisture infiltrating into the shallow bedrock underlying the area is discharged locally through springs.

#### **PROPOSED ACTION:**

- 3(a) Increased runoff and erosion could occur in some areas of the ranch if the stocking rate exceeds the carrying capacity of the pasture, and vegetative cover is diminished. The proposal to pasture up to 400 elk on the 500-acre site with supplemental feed available could result in maintenance of adequate vegetative cover if proper management practices are utilized; however, the maximum density is relatively high and could cause erosion problems.

If vegetative cover is reduced significantly, the operation could meet the definition of an "animal feeding operation" (ARM 17.30.1304(3)). If water containment structures are needed on the project site to control runoff and do not have the capacity for the 25-year, 24-hour storm, and the operation is determined to be a significant contributor of pollution to state waters, a "concentrated animal feeding operations" (CAFO) permit may be needed to permit the discharge (ARM 17.30.1330).

- 3(f) Alternative livestock fecal matter and nutrient-enriched water may have minor impacts on the quality of groundwater and surface water in the vicinity of the ranch, primarily during periods of snow melt and major precipitation events. Nutrients in runoff from the site could potentially enter Spanish Coulee and ultimately the Smith River. The impoundment in the unnamed coulee immediately west of the proposed alternative livestock site would moderate this effect. No water supply wells have been identified within 1-mile of the site, and two springs identified on the USGS topographic map are 0.5 mile or more to the east in the Hound Creek or Smith River drainages and are not likely to be affected by the site. Using the site as year-round cattle or horse pasture could present a similar potential to produce nutrients, depending on animal density. Potential transport of pathogens/bacteria from the ranch into Spanish Coulee is discussed in the following *Risk/Health Hazards* section.

#### **NO ACTION:**

Current hydrologic conditions are not expected to change under the No Action Alternative; ranching and farming would likely continue in the project area if the alternative livestock operation is not approved and completed.

#### **CUMULATIVE EFFECTS:**

The general area is used for ranching and sparse rural housing. Using the land to graze alternative livestock likely has a similar effect on water resources as stocking cattle. Using the entire 500-acre enclosure site for an alternative livestock operation is not likely to cause any significant cumulative effects on water resources, primarily because water seldom leaves the site. Erosion, sedimentation, and accumulation of fecal matter may be greater in the Pasture 2 area because of the cumulative dual use by alternative livestock and domestic cattle.



## COMMENTS:

Due to potential minor impacts identified above from increased runoff and elk fecal matter, several mitigation measures are recommended. Other water quality protection practices may be required by the Montana DEQ if it is determined that a CAFO permit is necessary or if significant water quality problems develop. Refer to "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996) and "Common Sense and Water Quality, A Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994) for further information on mitigation measures and CAFO permits. The following management practices are recommended to minimize the risk of discharging pollutants to state water:

**Required Stipulations:** None.

## Recommended Mitigation Measures:

- 3(a), 3(f), 3(h), 3(k). Maintain a reasonable stocking rate in the area to mitigate potential impacts from runoff and fecal matter. Potential water quality impacts also could be minimized by disposing dead animals, gut piles, and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste).
- 3(a), 3(b). For any areas that may have erosion and sedimentation problems, utilize best management practices (BMPs) where surface water could drain directly to Spanish Coulee and the Smith River. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.

## REFERENCES:

**Mesaros, Ken, 1999.** Ranch manager and applicant. Personal communication with Chris Cronin, Maxim Technologies during site visit on August 26, 1999.

**Montana Department of Environmental Quality (DEQ), 1998.** Montana's List of Waterbodies In Need Of Total Maximum Daily Load (TMDL) Development. Helena, MT.

**Montana DEQ, 1996.** Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.

**Montana Department of Health and Environmental Sciences (DHES), 1994.** Common Sense and Water Quality, A Handbook for Livestock Producers. Water Quality Division. Helena, MT.

**Montana Department of Natural Resources and Conservation (DNRC), 1999.** Computer file search of water rights. Obtained online from Internet. August 25, 1999.

**United States Geological Survey (USGS), 1971.** Spanish Coulee School Quadrangle, Montana, 1:24,000 topographic map.



## PHYSICAL ENVIRONMENT

4. <u>VEGETATION</u> Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Changes in the diversity, productivity or abundance of plant species?			X		Yes	4(a)
b. Alteration of a plant community?			X		Yes	4(b)
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				4(d)
e. Establishment or spread of noxious weeds?			X		Yes	4(e)

### AFFECTED ENVIRONMENT:

The proposed 500-acre alternative livestock site is situated on benchlands north of the Big Belt Mountains. The site is comprised of native rangeland (357 acres; 71%) and dry cropland (143 acres; 29%). This site is currently used to winter cattle, pasture horses, and grow wheat. Rangeland vegetation is located on relatively level ridge tops and moderately inclined slopes along several unnamed coulees that drain west to Spanish Coulee. The level ridges with native rangeland areas are comprised of the needle-and-thread grass/blue grama, and Idaho fescue/bluebunch wheatgrass habitat types. Common plant species in the former habitat type include needle-and-thread grass, blue grama, June grass, western wheatgrass, blue grass, mullein, gumweed, and cudleaf sagewort. In the latter habitat type, common plant species include, Idaho fescue, bluebunch wheatgrass, and balsamroot. On northern exposures and swales on the ridges, the western wheatgrass/western snowberry habitat type was also present. Common plant species in this habitat type included western wheatgrass, blue grass, western snowberry and chokecherry.

Soil in the native rangeland areas is shallow, and the plant community along the south slope of the major drainage has been extensively modified due to years of spring grazing. This area is dominated by fringed sagewort. Forage production in native plant communities is estimated at approximately 500 to 1,000 pounds per acre with an overall average estimated at 750 pounds per acre. Cultivated areas were in the process of being planted to alfalfa and tame pasture grasses. Hay harvest at such sites generally averages 3,250 pounds per acre (K. Mesaros, pers. comm., 1999). Total forage production for the rangeland sites is estimated at 267,750 pounds per year, and forage production for the croplands once the tame pasture plants are fully established would be about 464,750 pounds per year. The proposed alternative livestock operation could potentially produce 732,500 pounds of forage annually.

There are no federally-listed threatened or endangered plant species expected to occur within the proposed alternative livestock site. This area does contain suitable habitat for noxious weeds such as leafy spurge, Canada thistle, and mullein. The former two are Category 1 noxious weed and are already present on the site.





## PROPOSED ACTION:

- 4(a) The Proposed Action plans to place up to 400 adult elk in the proposed 500-acre alternative livestock site. The operation plan calls for a phased approach to bring the alternative livestock operation to full capacity over a period of several years. The occupancy period for the adult elk would be on a year-long basis. Annual forage consumption for 400 adult elk would be approximately 1,606,000 pounds of forage. The proposed alternative livestock site would supply only about 46% of annual forage needs of the elk when fully stocked. The maximum proposed stocking rate is considered high and probably would contribute to the long-term decline of vegetation resources both in terms of plant species composition and productivity of the site. Supplemental feed would be required to sustain the elk during the non-growing season and feed should be provided during the growing season to help reduce elk use on native vegetation.

Additionally, approximately 100 to 150 head of domestic cows/calves (at any given time on a rotational basis) would spend February, March and part of April in Pasture 2 (47 acres) that surrounds the handling facilities. Although cattle have traditionally wintered here and the vegetation is already impacted by cattle, the additional use of this pasture by elk during the remainder of the year would further impact the vegetation. Without special management, it may be difficult to maintain vegetative cover in Pasture 2. Moderate slopes in this area of about 10 to 20 degrees also would contribute to greater erosion rates.

- 4(b) There are no plans to alter the native plant communities on the proposed alternative livestock site. However, areas where elk are fed or handled may lose vegetative cover, and the pasture scheduled for dual use by cattle and elk would most likely suffer further loss of vegetation. The handling area around the ranch headquarters already lacks vegetation and represents about 5 acres. The proposed stocking level of 1.25 acres per elk for an entire year is high for an upland range site. In addition, one of the pastures would receive 2.5 months of use by 100 to 150 domestic cattle at any given time. This intensive stocking rate would result in a slow decline in palatable plant species as full capacity is reached. This would alter existing native plant communities, and favor unpalatable weeds and short growing grasses such as blue grama.
- 4(c) There are no known threatened or endangered plant species in this area.
- 4(d) Development of the proposed alternative livestock site would result in the loss of approximately 147 acres of cropland. The cropland was being taken out of production irrespective of the proposed alternative livestock operation because of the changing market conditions and diminishing government subsidies.
- 4(e) Leafy spurge and Canada thistle are present at this site and could potentially spread under the proposed intensive grazing. In addition, disturbed areas around the quarantine and handling facilities, or where elk are fed, would provide an opportunity for weeds to become established. Weed seeds could potentially be imported into the area with feed for the elk. The high stocking rate would be expected to also provide opportunity for weeds to become established throughout the proposed alternative livestock site.

## NO ACTION:

The No Action Alternative would likely result in the continuation of past management of pasturing domestic livestock.



## **CUMULATIVE EFFECTS:**

The dual use of a portion of the proposed alternative livestock site by elk and cattle would represent a cumulative impact on vegetation resources and would likely result in increased bare ground, increased soil erosion, and increased opportunity for weeds. At full capacity, the number of elk and cattle being fed in this area would approach 500 to 600 individuals.

## **COMMENTS:**

**Required Stipulations:** None.

## **Recommended Mitigation Measures:**

- 4(e). Monitor the proposed alternative livestock site for invasion of noxious weeds and treat affected areas in a timely manner. Should noxious weeds continue to be detected, a weed control program should be implemented to control the weeds, if not already in-place.
- 4(a), 4(b). Maintain a reasonable stocking rate in the area to maintain some vegetative cover on the site.
- 4(a), 4(b). Provide supplemental feed and minerals to the elk on a year-long basis to reduce excessive grazing on preferred pasture plants.

## **REFERENCES:**

**Mesaros, Ken, 1999.** Alternative livestock manager and applicant. Personal communication with Craig Knowles, FaunaWest. August 1999.



## PHYSICAL ENVIRONMENT

5. FISH/WILDLIFE Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Deterioration of critical fish or wildlife habitat?			X		No	5(a)
b. Changes in the diversity or abundance of game species?			X		Yes	5(b)
c. Changes in the diversity or abundance of nongame species?			X		Yes	5(c)
d. Introduction of new species into an area?		X				5(d)
e. Creation of a barrier to the migration or movement of animals?			X		No	5(e)
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5(f)
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X		Yes	5(g)

### AFFECTED ENVIRONMENT:

The proposed alternative livestock site and surrounding land represent moderate to good quality pronghorn antelope habitat. Over 1,200 pronghorn use a broad area surrounding the proposed site as year-long range (Figure 4). Counts of pronghorn conducted by FWP in the general area surrounding the proposed alternative livestock site have ranged from 219 to 471 pronghorn since 1995; this represents a density ranging from 1.5 to 3.3 animals per square mile (J. Williams, pers. comm., 1999). This is considered moderate density pronghorn habitat, but pronghorn numbers in this area are controlled by hunter harvests and not by carrying capacity of the habitat. The immediate area surrounding the alternative livestock site is considered the core area for the pronghorn population (J. Williams, pers. comm., 1999). There is no identified pronghorn winter habitat or migration corridor in the alternative livestock enclosure area. Several neighboring landowners have reported damage to their hay supplies due to antelope (B. Knutson, pers. comm., 1999). The FWP has previously provided fencing to protect affected stack yards. During the site visit in late summer 1999, one pronghorn was observed within the formerly cultivated area of the proposed alternative livestock site.

Both mule deer and white-tailed deer occur in the proposed alternative livestock area (Figure 4). During the site visit, one white-tailed deer fawn was observed among the trees and shrubs near the ranch headquarters. Due to the lack of extensive tree and shrub cover, this area is considered low density deer habitat with less than three deer per square mile. Over 2,000 elk winter in the Big Belt Mountains south of the alternative livestock site (see data files listed on Figure 4). The wintering area represents about 225 square miles of wintering habitat with elk density being approximately 10 elk per square mile; however, elk density near the perimeter of the area would be less (Figure 4). Elk on occasion are reported to travel through the grassland habitat in the vicinity of the project site (J. Williams and K. Mesaros, pers. comm., 1999). The riparian corridor of the Smith River valley is also considered to be moose wintering habitat, but not including the proposed alternative livestock site (Figure 4).

This area supports upland game bird populations. One covey of pheasant was observed at the ranch headquarters during the site visit, and sharp-tailed grouse and gray partridge are present in this area. Mountain lions and black bears are present in the Big Belt Mountains to the southeast of the proposed



alternative livestock site and east of the Smith River. An occasional lion or bear would be expected to pass through the area. This area is used by migratory bald eagles and peregrine falcons (federally-listed bird species). No other federally-listed species are expected to occur in this area.

#### PROPOSED ACTION:

- 5(a) The Proposed Action plans to place up to 400 adult elk on 500 acres of land. Elk would be present on the proposed alternative livestock site on a year-long basis. The primary purpose of the proposed operation is to breed elk, harvest antlers and meat, and provide some private trophy elk shooting. Trophy bull elk shot during the fall would come under the ownership of the shooters. The gut pile disposal method has not been determined, yet; but must meet requirements set forth in ARM 32.4.1002.

The proposed alternative livestock site is not located within any identified critical big game winter range, nor is it located along a migration corridor. The area is year-long deer and pronghorn habitat. Up to 100 pronghorn and 50 mule deer have been sighted in the vicinity of the site during some winters. However, these animals are not confined to this area by topographic features or by unique habitats, and they do not travel along a specific route into or out of this area. An occasional elk may pass through this area. The exclusion of wild pronghorn and deer from 500 acres would displace pronghorn and deer from moderate quality habitat. This may impact the individual survivorship of a few of pronghorn and deer, but it is not likely to significantly impact the overall pronghorn and deer population in the general area. Pronghorn and deer displaced from the site may move to adjoining lands, increasing usage of native vegetation and hay supplies at neighboring properties. The Proposed Action would not impact any threatened or endangered species.

There are no perennial streams or natural ponds/lakes located within the proposed alternative livestock site. Several springs are located at the site that have already been developed for livestock watering (Figure 1). There is also a small impoundment near the ranch headquarters (middle of Section 14) that would be within the proposed operation (Figure 1). Immediately west of the alternative livestock site at the mouth of the unnamed coulee that bisects the site is a 10-acre impoundment that would likely contain much of the run-off when it occurs from the alternative livestock site. Irrigation water from Spanish Coulee is normally cycled through this reservoir during summer, and outflow from this reservoir is through an irrigation canal. This reservoir is stocked with fish and they have survived with run-off from the cattle wintering operation at the head of the drainage. The addition of 400 elk into this drainage basin may lower water quality in the reservoir.

- 5(b) The proposed alternative livestock site would remove habitat that potentially could support pronghorn and wild deer on a year-long basis; however, it is unlikely to change the overall population dynamics of pronghorn and deer in this area. Deer have also been documented to crawl under game proof fencing at sites dug by coyotes (B. Sommers and B. West, pers. comm., 1998). Deer entering the enclosure would likely be destroyed rather than returned to the wild.

Wild elk pass through this area on occasion and may be attracted to the alternative livestock operation, especially during the rut. The wild elk herds south of the proposed alternative livestock site have been managed to maintain a high percentage of mature bulls in the population (J. Williams, pers. comm., 1999). It is possible that during the rut, mature domestic and wild bulls would fight through the fence. Loss of fence integrity can lead to ingress and egress. Any wild elk that may enter the enclosure would likely be destroyed rather than returned to the wild.

The proposed alternative livestock fence would cross moderate (10 to 20 degrees) to steep (20+ degrees) slopes perpendicular to the slope at only two sites where the west boundary fence would cross the main coulee. Steep, irregular topography can present wild elk and deer with a topographic advantage to jump fencing. There is a possibility that wild elk and deer could enter





the enclosure at such sites. Exterior fencing constructed on slopes of 30 degrees or greater may require additional, stronger or higher fence posts, special grading, additional wire to increase fence height and/or other measures (ARM 12.6.1531). Most slopes along the proposed fenceline are less than 30 degrees; some small areas in the bottom of the main coulee on the western side of the site may exceed 30 degrees. Wild ungulates entering the enclosure and exposed to alternative livestock would likely be destroyed rather than released back to the wild. These impacts may affect individuals but not populations.

Although mountain lions and bears could potentially pass through this area and be attracted to the alternative livestock, the likelihood of a lion or bear entering the enclosure is reduced because the site lacks significant timber cover. Should a predator enter the enclosure, live capture and removal of the trespassing animal is possible. However, this is not without risks to the animal.

- 5(c) The containment of up to 400 adult elk on 500 acres on a year-long basis is expected to degrade the patches of chokecherry and snowberry located on north-facing exposures. This would likely reduce the abundance of neotropical migrant birds using the proposed alternative livestock site.
- 5(d) There would be no introduction of a new species to this area.
- 5(e) The proposed alternative livestock operation may affect the local movement of pronghorn and deer through this area. In general, wild ungulates would need to walk 2 miles to reach the same location that could be obtained by walking 1 mile if the fence were not present. A distance of 2 miles is within the range of daily deer and pronghorn movements and this is not anticipated to be a significant impact on pronghorn and deer. The route around the alternative livestock site would not force pronghorn to cross hostile topography or unfavorable habitat, but deer would be forced to travel through areas with no escape cover. A similar situation exists for transient elk. Under deep snow conditions, the proposed fence might interfere with free movement through the area by pronghorns. Coyotes may be able to effectively use the alternative livestock fence as a barrier to aid in capturing deer and pronghorns.
- 5(f) The proposed alternative livestock operation is not likely to cause impacts to bald eagles or peregrine falcons.
- 5(g) Construction of the enclosure would not result in conditions that increase stress to wildlife species living in this area beyond that already discussed in 5(e) above.

#### **NO ACTION:**

No wildlife related impacts are expected to occur under the No Action Alternative. The area would continue to be managed for domestic livestock grazing.

#### **CUMULATIVE EFFECTS:**

No cumulative effects are expected on wildlife resources associated with the proposed project.

#### **COMMENTS:**

**Required Stipulations:** None.



### **Recommended Mitigation Measures:**

The following standard alternative livestock management practices would help to minimize impacts to free-ranging wildlife species. Implementation of these practices is highly recommended and should be considered a form of mitigation.

- 5(g). Store hay, feed, and salt away from exterior fences or enclose in bear-resistant containers or buildings.
- 5(g). Feed alternative livestock at interior portions of the enclosure and not along the perimeter fence.
- 5(g). Remove dead animals, excess fecal material, and waste feed from the alternative livestock site and deposit at an approved site not likely to be used by humans, and domestic and wild animals.
- 5(b), 5(c). If fence integrity or ingress/egress becomes a problem, adjustment of fence requirements to include double fencing, internal fencing, electrification, or increased height may become necessary.
- 5(g). If wild bull elk and domestic bull elk fight through the perimeter fence during the rut, develop an interior pasture where domestic bull elk could be contained during the rut to prevent damage to the fence.

### **REFERENCES:**

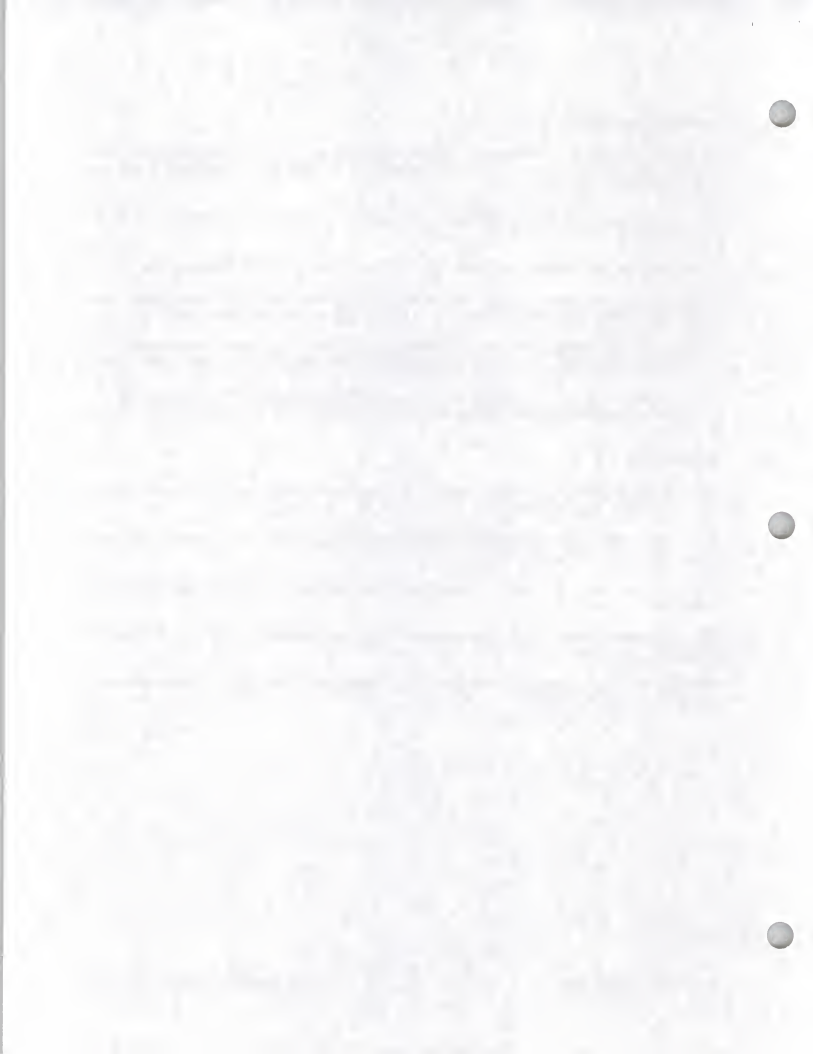
**Knutson, Bruce, 1999.** FWP Game Warden. Personal communication with Chris Cronin, Maxim Technologies, Inc. August 1999.

**Mesaros, Ken, 1999.** Alternative livestock manager and applicant. Personal communication with Craig Knowles of FaunaWest. August, 1999.

**Sommers, Brian, 1998.** Montana FWP Game Warden. Personal communication with Craig Knowles of FaunaWest. July 1998.

**West, Bill, 1998.** National Bison Range manager. Personal communication with Craig Knowles of FaunaWest. April 1998.

**Williams, Jim, 1999.** Montana FWP wildlife biologist. Personal communication with Craig Knowles of FaunaWest. September 1999.



## HUMAN ENVIRONMENT

6. <u>NOISE EFFECTS</u> Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Increases in existing noise levels?			X		Yes	6(a)
b. Exposure of people to severe or nuisance noise levels?		X				

### **AFFECTED ENVIRONMENT:**

Little noise occurs in the general area of the proposed alternative livestock site because of the sparse population and lack of other noise generating activities in this area.

### **PROPOSED ACTION:**

- 6(a) Noise levels in the vicinity of the proposed alternative livestock site may increase temporarily during fence and other associated construction. Other noise expected from the proposed alternative livestock operation would be from bull elk bugling during the mating season. Shooting noise would also occur periodically within the enclosure. Population is sparse in the project area, with a few residences located 1-2 miles east-southeast of the site; however, these residences are located in the Hound Creek and Smith River valley bottoms and would not be subject to direct noise from the alternative livestock operation. Due to distances to the nearest residences and overall sparse population in the area, it is expected that noise generated from the proposed alternative livestock operation would not cause a problem.

### **NO ACTION:**

No impacts to existing noise levels are expected from the No Action Alternative.

### **CUMULATIVE EFFECTS:**

No additional impacts on noise levels from past, present or reasonably foreseeable activities near the Proposed Action are anticipated.

### **COMMENTS:**

Due to distances to the nearest residences and overall sparse population in the area, it is expected that noise generated from the proposed alternative livestock operation would not cause a problem. If complaints regarding noise do occur, however, some mitigation measures could be implemented.

**Required Stipulations:** None.

### **Recommended Mitigation Measures:**

- 6(a). Reduce the frequency of shooting and/or modify the shooting period if shooting in the enclosure results in substantial noise complaints.
- 6(a). Reduce the number of bull elk during the rut if excess noise from bugling results in substantial complaints.



## HUMAN ENVIRONMENT

7. LAND USE Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the Proposed Action?		X				
d. Conflict with any existing land use that would be adversely affected by the Proposed Action?			X		Yes	7(d)
e. Adverse effects on or relocation of residences?			X		No	7(d)

### AFFECTED ENVIRONMENT:

Land surrounding the proposed alternative livestock site is cropland and pasture grazed by cattle and horses (Figure 2). The Smith River (1½-2 miles east) receives public fishing and boating use. Some public state land occurs within 2-4 miles of the site (Figure 3). Public lands in the general area typically are leased by local ranchers for agricultural use and are occasionally used by local residents for recreational purposes (mostly hunting and fishing). Some public hunting has occurred historically on the Mesaros Ranch. This sparsely populated area apparently is not zoned for any specific use, although agriculture is the prevailing land use in the vicinity of the proposed alternative livestock site. Several county roads extend around the alternative livestock site at distances of about 1-2 miles (Figure 3). The nearest residences are located approximately 1-2 miles east-southeast of the site along Hound Creek and the Smith River. A underground cable easement associated with Malmstrom Air Force Base crosses the eastern portion of the alternative livestock site (Figure 1).

### PROPOSED ACTION:

- 7(d) The proposed alternative livestock ranch would be compatible with existing agricultural land uses. The Proposed Action would result in the loss of about 143 acres of dry cropland. The alternative livestock site is currently used to winter cattle, pasture horses, and grow wheat. With respect to land use, no significant conflicts should result between operation of the alternative livestock site and the agricultural or residential areas. Some hunting area previously used by the public may be lost because the enclosure. Potential effects of the Proposed Action on adjacent property values are difficult to evaluate because some nearby property owners may like the idea of an alternative livestock ranch, whereas others would find it undesirable.

### NO ACTION:

If the proposed alternative livestock operation is not approved, the site likely would continue to be managed for pasturing domestic livestock.





**CUMULATIVE EFFECTS:**

No cumulative impacts are expected on land use because of the compatible land use and lack of other alternative livestock operations in the area.

**COMMENTS:**

**Required Stipulations:** None.

**Recommended Mitigation Measures:**

- 7(d). Escort persons into and out of the alternative livestock perimeter fence who may need to access the buried cable line under the easement agreement to assure that a gate is not inadvertently left open.



## HUMAN ENVIRONMENT

8. RISK/HEALTH HAZARDS Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Risk of dispersal of hazardous substances (including, but not limited to chemicals, pathogens, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8(a)
b. Creation of any hazard or potential hazard to domestic livestock?			X		Yes	8(b)
c. Increased risk of ingress/egress resulting in contact and/or disease between alternative livestock and wild game?				X	Yes	8(c)
d. Creation of any hazard or potential hazard to human health?				X	Yes	8(d)

### AFFECTED ENVIRONMENT:

See Section 5 (*Fish/Wildlife*) and Section 7 (*Land Use*) for information that describes the affected environment with respect to this section (*Risk/Health Hazards*).

### PROPOSED ACTION:

8(a) There is a minor potential for water-borne disease pathogens, if present, to be transported out of the alternative livestock site because surface water seldom leaves the enclosure area. One pond and flow from three springs would be included in the enclosure; however, water from these sources generally does not flow out of the proposed enclosure area, except during runoff periods of significant snowmelt and/or precipitation. The impoundment in the unnamed coulee west of the proposed alternative livestock site (Figure 1) would capture runoff from the enclosure; some of this water is diverted for irrigation purposes. Excessive accumulation of manure may occur on Pasture 2 due to its dual use by cattle and elk. There is potential for *E.coli* bacteria levels in runoff water to become elevated. However, the general lack of surface water flow out of the proposed alternative livestock site, as well as alternative livestock disease testing requirements, results in a minor potential for disease transmission via water movement. Some of the water may enter Spanish Coulee during spring runoff or major precipitation events. As stated in the Water section, several landowners possess water rights on Spanish Coulee. The route of chronic wasting disease (CWD) transmission at this time is unknown; therefore, the potential for transmission by soil, water or other media cannot be determined.

8(b) Two currently monitored diseases -- brucellosis and tuberculosis -- are potentially transmittable between alternative livestock, cattle, and horses. Domestic livestock are currently pastured on adjacent rangeland and pastureland, and there would be potential for significant impacts if contact between domestic livestock and alternative livestock (elk) resulted in the transfer of disease. Mr. Mesaros intends to winter approximately 100 to 150 head of domestic cows/calves (at any given time on a rotational basis) in February, March and part of April within one of the internal pastures (Pasture 2; 47 acres) that surrounds the handling facilities. Cattle and elk would not be allowed to intermingle in the enclosure; however, excessive accumulation of manure by both species may occur on the pasture. Chronic wasting disease (CWD) also has been detected in alternative livestock, but the mode of transmission is unknown and there is no test for this disease in living animals. CWD has been a known wildlife disease for 20 years in Colorado and Wyoming. Wildlife there was observed to be dying from a "wasting syndrome" for 30 years, however this syndrome was not determined to be a transmissible spongiform encephalopathy until approximately 1978. There is no evidence of CWD transmission to domestic livestock or humans.



The risk of disease being passed from alternative livestock to domestic livestock should be minimal if fence integrity is maintained and the stipulations and/or mitigation measures described in this EA are followed. Potential for disease transmission to domestic livestock from alternative livestock is also mitigated through DoL disease testing requirements. All animals to be placed on this alternative livestock site are required to be tested for tuberculosis at the time of import, purchase and/or transportation to the enclosure. A test for brucellosis is required for all alternative livestock that are sold or moved within the state, and is required for all alternative livestock imported into Montana. Montana is presently a tuberculosis-free and brucellosis-free state (i.e., these diseases have not been diagnosed in domestic livestock). Each alternative livestock operation is required to have access to an isolation pen (quarantine facility) on the site or approved quarantine plan to isolate any animals that are imported or become ill. The state veterinarian can require additional testing and place herds under strict quarantine should problems arise.

- 8(c) There is potential for significant impacts if alternative livestock (elk) carry or become infected with a contagious wildlife disease or parasite such as tuberculosis, and then come in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. Potential for disease transmission between domestic elk, cattle, and wildlife is partially mitigated through DoL disease testing and FWP fencing requirements. This potential is further mitigated by the fencing surrounding the facility. The release of a contagious disease in the wild could impact more than neighboring deer or elk since they are capable of moving considerable distances on a seasonal basis. It is also possible diseases and parasites carried by wild deer or elk could be introduced to the alternative livestock. Ingress of wild deer or elk would likely result in the destruction of the trespassing animals. Spread of a contagious wildlife disease may directly or indirectly (depending on nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting or exposing hunters to diseases which are contagious to humans as well.

Fence integrity must be maintained to minimize the potential for ingress and egress. Hybridization of wildlife by alternative livestock can result from ingress or egress. Trees, steep slopes, and snow-drift prone areas along the perimeter fence have the potential to significantly affect fence integrity (i.e., breach fence; change effective height of fence).

- 8(d) If tuberculosis or brucellosis were present and subsequently transmitted from alternative livestock to wild elk, hunters field dressing wild elk would be subject to significant risk of infection. Veterinarians and meat cutters working with diseased alternative livestock are at risk of becoming infected with brucellosis or tuberculosis. Risk to human health from diseased animals could be significant, but routine brucellosis and tuberculosis testing requirements for alternative livestock offer a measure of surveillance that minimizes that risk. Failure to comply with these requirements may present grounds for license revocation.

As mentioned above in the *Land Use* section, the nearest residences are located approximately 1 to 2 miles east-southeast of the proposed alternative livestock site along the bottomlands of Hound Creek and Smith River. County roads are located approximately 1 to 2 miles around the site. Public land (state-owned) in the vicinity of the alternative livestock site is located 2 to 4 miles from the site. The county roads, residences, and some public land are within average maximum ranges of high-powered big game rifles (i.e., 1.5 to 3 miles or more). As a result, a potential exists for significant injury to residents or travellers in the area. However, numerous variables must be considered to determine actual lethal potential of a rifle bullet at distance, and topography (i.e., coulees, hills, and valleys) would provide some protection from bullets used at the alternative livestock operation.



## **NO ACTION:**

Risk/health hazards would not occur from the No Action Alternative, other than those that may be associated with the existing land use (e.g., normal shooting activities associated with the hunting season).

## **CUMULATIVE EFFECTS:**

The combined use of the alternative livestock site by up to 400 elk on a year-long basis and 500 cattle on a seasonal basis could result in considerable accumulation of manure. Other cumulative effects are not expected to result from the Proposed Action because the area is remote and generally used for farming and ranching activities.

## **COMMENTS:**

### **Required Stipulations:**

The following stipulations are imposed by FWP for the Mesaros Ranch Bugle Alternative Livestock operation and are designed to mitigate significant impacts identified in the EA to below the level of significance:

- (1) Inspect the exterior alternative livestock fence and document its condition on a weekly basis and immediately after events likely to damage the fence to insure its integrity with respect to trees, burrowing animals, predators and other game animals. Should ingress of wildlife or egress of alternative livestock during winter become a problem, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress.*
- (2) A guide or representative of the ranch must accompany each shooter to be sure shooting does not occur toward nearby residences (those located within approximately 1 mile of the enclosure).*

The first stipulation is imposed to mitigate a potentially significant risk from ingress/egress and the resulting potential contact with domestic livestock and/or wildlife because of potential fence integrity problems. Risk to livestock and wildlife from contact with alternative livestock is potentially significant due to the site being located in an area currently utilized by domestic livestock and wild game. The second stipulation is imposed to mitigate a potentially significant risk to public health and safety due to the proximity of some residences to the alternative livestock operation. The requirement to have a guide with each alternative livestock shooter to be sure shooting does not occur in toward the nearby residences would reduce the chances of impacting human health and safety.

### **Recommended Mitigation Measures:**

- 8(a), 8(b). The mitigation measures recommended in Section 4 (*Vegetation*) and Section 5 (*Fish/Wildlife*) are applicable to this section. In addition, risk of disease epidemic or heavy parasite infections among alternative livestock can be minimized by maintaining a reasonable stocking rate in relation to the enclosure size, periodic removal of manure from concentration areas, and development of a disease immunization and parasite treatment protocol as applicable to alternative livestock.
- 8(c). Where the perimeter fence crosses the bottom of the main drainage on the west side, a culvert should be placed that has suitable capacity to handle spring runoff, and fill should be placed over the culvert to reduce the steepness of the slopes at this point. The culvert should be equipped with a grate to prevent ingress/egress.





**REFERENCES:**

**Montana Fish, Wildlife & Parks, 1996.** Hunter Education, Gun Safety, Hunter Responsibility. Falcon Press, Helena and Billings, MT.

**North American Hunting Club and Wildlife Forever, 1996.** Third National Shooting Range Symposium, June 23-25, 1996, Orlando, Florida. Proceedings.



## **HUMAN ENVIRONMENT**

<b>9. COMMUNITY IMPACT</b> Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Changes in historic or traditional recreational use of an area?			X		No	9(e)
f. Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?		X				
g. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

### **AFFECTED ENVIRONMENT:**

The proposed alternative livestock site is located in Cascade County, approximately 15 miles east of Cascade. Local residents in the vicinity of the Proposed Action appreciate their space and outdoor recreational activities provided by the natural environment and its resources, such as hunting, fishing, hiking, snowmobiling, photographing, and wildlife and landscape viewing. Several parcels of state-owned land are located 2-4 miles from the alternative livestock operation area.

### **PROPOSED ACTION:**

9(e) The proposed 500-acre alternative livestock enclosure is not expected to remove a significant portion of historical hunting area. Persons who desire trophy elk could pay to shoot elk in the enclosure, if available, even though local hunters probably would not pursue this option.

### **NO ACTION:**

Denial of the alternative livestock license (i.e., No Action Alternative) may be welcomed by those opposed to it, if any. Ill feelings, however, may be harbored by people who favor the Proposed Action if the license is denied.

### **CUMULATIVE EFFECTS:**

No significant cumulative impacts are anticipated on communities from operation of the proposed alternative livestock site.

### **COMMENTS:**

No stipulations or mitigation measures are suggested with respect to community impacts.



## **HUMAN ENVIRONMENT**

10. <u>PUBLIC SERVICES &amp; TAXES</u>	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
Would Proposed Action result in:						
a. A need for new or altered government services (specifically an increased regulatory role for FWP and Dept. of Livestock)?			X		NA	10(a)
b. A change in the local or state tax base and revenues?			X		NA	10(b)
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				

## **AFFECTED ENVIRONMENT:**

The alternative livestock applicant currently pays property taxes for the land proposed for the alternative livestock site. The prevailing land use in the vicinity of the Proposed Action is agricultural which has a low appraisal value.

## **PROPOSED ACTION:**

- 10(a) Approval of the Proposed Action would increase time and expenses spent by FWP and DoL personnel inspecting, monitoring and responding to complaints (if any) about the alternative livestock operation or egress/ingress problems. Since neither FWP or DoL has the option of hiring additional employees to handle the increased workload that could potentially be created by the alternative livestock operation, activities of the current staff may need to be re-prioritized to meet the potential increased demand created by the Proposed Action.
- 10(b) Placement of alternative livestock in the enclosure may increase the annual tax contribution, with collected taxes going toward the state, county, and/or local school district. The state per capita fee and county/local tax for the proposed maximum of 400 alternative livestock (elk) would consist of: \$12/head plus 4% of market value per animal (1999 market values are \$821 for 2 year-old+ male individual and \$411 for 2 year-old+ female individual)(Cascade County Assessor, 1999).

## **NO ACTION:**

Under the No Action Alternative, FWP and DoL would not have to inspect and monitor the proposed alternative livestock operation. The current status of tax payments for this property would remain for the No Action Alternative.

## **CUMULATIVE EFFECTS:**

No cumulative impacts are expected on public services and taxes from the Proposed Action. Some cumulative effects would occur on agency time and expenses to regulate the alternative livestock operation.

## **COMMENTS:**

No stipulations or mitigation measures are recommended with respect to public services or taxes.



## HUMAN ENVIRONMENT

11. AESTHETICS/RECREATION Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?			X		Yes	11(c)

### AFFECTED ENVIRONMENT:

The alternative livestock site is located within 1-2 miles of several county roads, and some scattered parcels of state-owned land are within 2-4 miles of the site (Figure 3). Public land in the general area typically is leased by local ranchers for agricultural use and are occasionally used by local residents for recreational purposes (mostly hunting and fishing). Some public hunting has historically be allowed on the Mesaros Ranch. The nearby Smith River receives public fishing and other recreational use.

### PROPOSED ACTION:

- 11(c) Public hunting during the hunting season may be affected to a minor degree because of the proposed 500-acre alternative livestock enclosure; however, persons who desire trophy elk could pay to shoot elk in the enclosure, if available, even though local hunters probably would not pursue this option.

### NO ACTION:

No adverse impacts to aesthetics or recreation are expected under the No Action Alternative.

### CUMULATIVE EFFECTS:

No cumulative impacts are expected to aesthetics or recreation.

### COMMENTS:

No stipulations or mitigation measures are recommended for aesthetics or recreation.





## HUMAN ENVIRONMENT

12. <u>CULTURAL &amp; HISTORICAL RESOURCES</u> Would Proposed Action result in:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?	X				Yes	12(a)
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				

### AFFECTED ENVIRONMENT:

A file search was conducted by the State Historic Preservation Office (SHPO) for the proposed project area. Results of this search show there are no previously recorded historic or archaeological sites within the project area; however, no such cultural resource inventories have been conducted (SHPO 1999).

### PROPOSED ACTION:

- 12(a) According to SHPO (1999), there is a high likelihood of unknown or unrecorded cultural properties at the alternative livestock site because cultural resource sites are known to exist elsewhere in the general area. SHPO (1999) recommends that a reconnaissance be conducted in order to determine whether or not such sites exist and if they would be impacted.

### NO ACTION:

No impacts to cultural resources are expected from the No Action Alternative unless other disturbances occur within the property.

### CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed alternative livestock site are anticipated.

### COMMENTS:

**Required Stipulations:** None.

### Recommended Mitigation Measures:

If archeological artifacts are observed during construction of the alternative livestock fence or from other activities, work should stop in the area and the discovery reported to the Montana Historical Society, Historic Preservation Office, in Helena (406-444-7715). If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs and preserve the artifact(s).

### REFERENCES:

**Montana State Historic Preservation Office (SHPO), 1999.** Letter from Philip Melton (SHPO, Helena, MT) to Daphne Digrindakis (Maxim Technologies, Inc.), dated August 16, 1999.



## SUMMARY

13. SUMMARY Would Proposed Action, considered as a whole:	Potential Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total)			X		Yes	13(a)
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?				X	Yes	13(b)
c. Potentially conflict with the substantive requirements or any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts would be proposed?	X					13(d)
e. Generate substantial debate or controversy about the nature of the impacts that would be created?			X		Yes	13(d)

## PROPOSED ACTION:

- 13(a) The dual use of a portion of the alternative livestock operation for both elk (up to 400 total in the entire 500-acre enclosure) and domestic cattle (100-150 at any given time) may result in excessive manure accumulation. In such circumstances, E.coli bacteria levels could be elevated in runoff water during spring snowmelt and during periods of heavy rainfall.
- 13(b) There is a potential for spread of a contagious disease in the wildlife population, such as tuberculosis or chronic wasting disease (contact through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress). Release of a contagious disease in the wild could severely impact native wildlife populations. It is also possible disease and parasites carried by wild elk and deer could be introduced to alternative livestock. Spread of a contagious wildlife disease may directly or indirectly (depending on the nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting, or exposing hunters to diseases that are also contagious to humans. Hybridization of wildlife by alternative livestock could result from ingress or egress. Trees, steep slopes, and snow drift-prone areas along the perimeter fence have the potential to significantly affect fence integrity. Potential for hybridization of wild game could occur if alternative livestock were to escape from an enclosure.
- 13(d) The nature of impacts to wildlife from alternative livestock operations is currently under debate in Montana and other states. The following issues are of the greatest concern with respect to alternative livestock operations:
- Disease transmission from alternative livestock to wildlife is possible if the alternative livestock are diseased and have an opportunity to come into contact with wildlife.
  - Hybridization of Montana's game species resulting from the ingress/egress of animals.



- Ingress potential of wild animals into the alternative livestock site. Ingressing elk and deer are generally killed, typically by FWP wardens, to prevent potential disease transmittal. Ingressing mountain lions and black bears may be immobilized and removed.
- Theft of wild animals for financial gain on alternative livestock operations.
- Ethics of shooting alternative livestock in an enclosure.
- Public safety from shooting operations.

Some of these issues are particularly controversial when alternative livestock sites block migration routes or consume significant areas of land historically utilized by wild game. Inadequate perimeter fencing and fence monitoring by the alternative livestock operator can also lead to ingress/egress events.



## SUMMARY EVALUATION OF SIGNIFICANCE CRITERIA

- a. Does the Proposed Action have impacts that are individually minor, but cumulatively considerable? (A project may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)

Possibly. The dual use of a portion of the alternative livestock operation for both elk (up to 400 total in the entire 500-acre enclosure) and domestic cattle (100-150 at any given time) may result in excessive manure accumulation. In such circumstances, E.coli bacteria levels could be elevated in runoff water during spring snowmelt and during periods of heavy rainfall.

- b. Does the Proposed Action involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?

Yes. An unlikely, but extremely hazardous event should it occur, would be the hybridization of wildlife and/or spread of a disease or parasite from alternative livestock to wildlife. The risk of these events occurring can be reduced by following the stipulations and mitigation measures listed in Section 5 (Fish/Wildlife) and Section 8 (Risk/Health Hazards) of this EA, and regular disease surveillance.

On April 9, 1999, new administrative rules that were adopted by the Montana Board of Livestock became effective regarding surveillance of captive cervids with respect to CWD, and importation restrictions on alternative livestock (see ARM 32.4.1301-1320).

- c. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

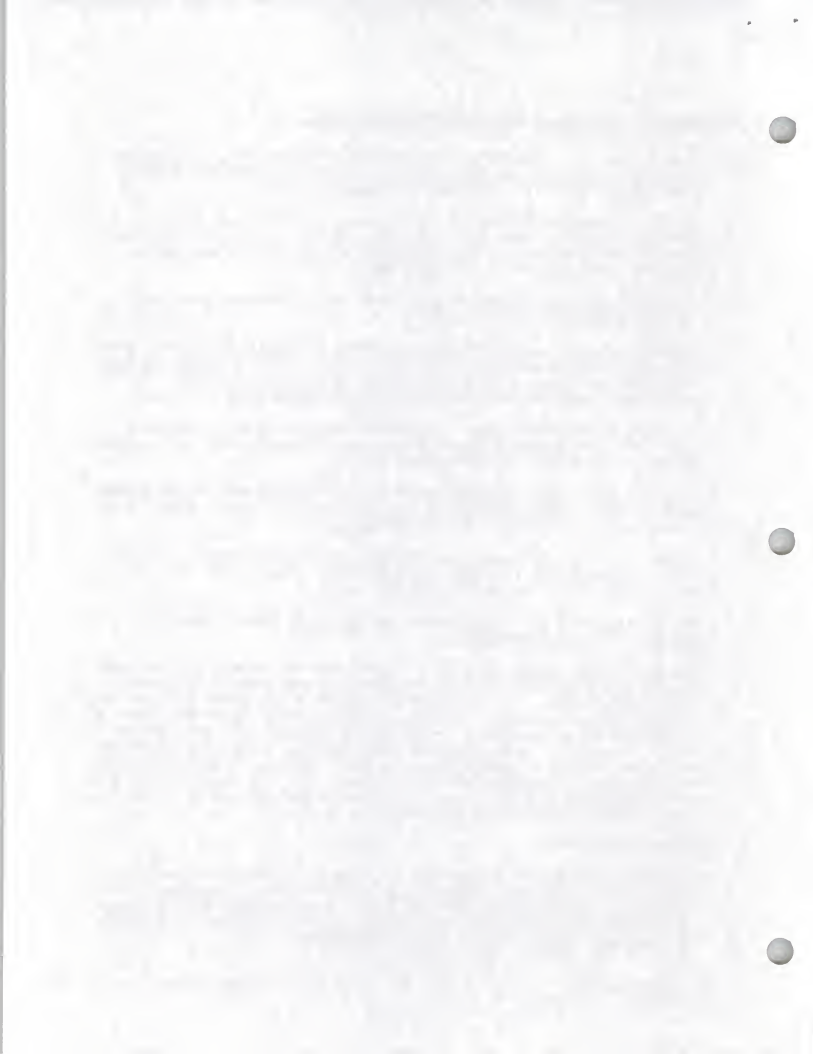
No Action Alternative: The No Action Alternative would avoid many of the potential impacts listed above. This site would likely be managed for continued livestock grazing. The No Action Alternative probably would not result in exclusion of wildlife from the site.

- d. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A. Mitigation measures described in this section address both minor and significant impacts. FWP would require stipulations to mitigate all potentially significant impacts from the Proposed Action. Most potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended, but not required.

### REQUIRED STIPULATION #1 & #2

- (1) *Inspect the exterior alternative livestock fence and document its condition on a weekly basis and immediately after events likely to damage the fence to insure its integrity with respect to trees, burrowing animals, predators and other game animals. Should ingress of wildlife or egress of alternative livestock during winter become a problem, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress.*





- (2) *A guide or representative of the ranch must accompany each shooter to be sure shooting does not occur toward nearby residences (those located within approximately 1 mile of the enclosure).*

The first stipulation is imposed to mitigate a potentially significant risk from ingress/egress and the resulting potential contact with domestic livestock and/or wildlife because of potential fence integrity problems. Risk to livestock and wildlife from contact with alternative livestock is potentially significant due to the site being located in an area currently utilized by domestic livestock and wild game. The second stipulation is imposed to mitigate a potentially significant risk to public health and safety due to the proximity of some residences to the alternative livestock operation. The requirement to have a guide with each alternative livestock shooter to be sure shooting does not occur in toward the nearby residences would reduce the chances of impacting human health and safety.

#### **Restriction on Private Property Use**

The stipulations do not restrict the use of private property by the following: inspecting the fence on a weekly basis; adjusting fence height where snow drifting may cause ingress/egress; and using a guide to assure shooting does not occur in the direction of nearby residences.

#### **Alternatives**

*Do not perform the safety measures described above regarding fence integrity and shooting.*

This alternative would not adequately address the potential problems that may compromise fence integrity resulting in ingress/egress at the alternative livestock site, and the potential public health effects from the shooting operation.

#### **Benefits from Imposing the Stipulation**

The stipulations are imposed to mitigate potential risk to domestic livestock, wildlife, and human health from the Proposed Action. The stipulations, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to domestic livestock, wildlife, and human health.

#### **Types of Expenditures the Stipulation Would Require**

Performing the measures described above as needed to maintain and monitor fence integrity would not cause a substantial increase in fence construction and alternative livestock operation costs. The requirement to have a guide present during shooting activities is not expected to increase expenses substantially assuming the guide is already associated with the alternative livestock operation.

#### **Stipulation's Effect on Property Values**

None.



### **PART III. NARRATIVE EVALUATION AND COMMENT**

**Wildlife use of the area and potential for through-the-fence contact with alternative livestock (consider year-around use, traditional seasonal habitat use, and location of travel routes and migration corridors).**

Through the fence contact: The proposed alternative livestock site is located in moderate density pronghorn habitat and low density deer habitat. An occasional wild elk would be expected in this area as well, and wild elk would be expected to be attracted to the enclosure during the rut by the presence of alternative livestock (elk). Nose-to-nose contact is most likely to occur between wild and domestic elk. Transmission of disease or parasites may occur during nose-to-nose contact, nose-to-body contact, and by contacting vegetation and feces along the fence line. Disease transmission may occur from wild ungulates to alternative livestock. Diseases such as tuberculosis are highly contagious and are known to be potentially transmitted between alternative livestock and wild big game species. Tuberculosis can also be transmitted to humans and is a serious health risk.

Chronic Wasting Disease (CWD) has been documented in alternative livestock in at least three states. At this time, there is no evidence that CWD is present in wild deer or elk in Montana. Both the DoL and FWP have implemented extensive surveillance programs to determine if CWD is present in Montana alternative livestock or wildlife. There is no diagnostic test for CWD in live animals and confirmation of the disease can only be made upon post-mortem necropsy. However, CWD disease is believed to be confined to cervids and has not been documented in bovids.

Risk of disease transmission can be reduced by maintaining the integrity of the enclosure fence, by maintaining a healthy domestic big game population, and by following stipulations and mitigations presented in this EA. If the alternative livestock operation is managed properly, the risk of disease transmission from alternative livestock to wild ungulates would likely be minimal.

**Potential for escape of alternative livestock or ingress of wildlife (consider site-specific factors that could reduce the effectiveness of perimeter fences built to standards outlined in Rule 12.6.1533, including steepness of terrain, winter snow depths/drifts, susceptibility of fences to flood damage, etc.).**

Fence integrity: Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. The proposed alternative livestock site is located on grassland benches north of the Big Belt Mountains. The area is comprised of relatively level ridges and is bisected by one drainage with moderate to steep slopes. The fence would perpendicularly cross two moderate (10-20 degrees) to steep (20+ degrees) slopes. Where the fence crosses the bottom of the drainage, a culvert should be placed that has suitable capacity to handle spring runoff, and fill should be placed over the culvert to reduce the steepness of the slopes at this point. Overall, the site potential for fencing this alternative livestock site ranges from good on upland areas to fair on the steeper slopes either side of the drainage.

The enclosure site is located at an elevation of about 4,000 feet. The expected snow levels during winter will vary greatly in relation to the amount of snowfall, and wind velocity and direction associated with storms passing through this area. This area has the potential to receive considerable snowfall in single storm events and cumulatively during the winter, but during normal winters only 6-12 inches of snow is expected. Drifting snow has the potential to be problem where the game farm fence goes from a flat level ridge to a moderate slope. Hard compacted drifts would reduce the effective height of the enclosure fence.



**Proportion (%) of the total habitat area currently used by wildlife that would be enclosed or otherwise impacted.**

The proposed alternative livestock enclosure would exclude some pronghorn and deer from 500 acres of year-long range comprised of grassland and agricultural land. Rangeland and agricultural land in this general area are broadly distributed and the loss of 500 acres of this habitat would not impact local populations of deer and pronghorn. Overall, the proposed alternative livestock site represents less than 1% of available habitat in this area.



## **PART IV. EA CONCLUSION**

### **1. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO**

No. The appropriate level of analysis for the Proposed Action is a mitigated EA because:

- all impacts of the Proposed Action have been accurately identified in the EA; and
- all identified significant impacts would be mitigated to minor or none.

### **2. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?**

Upon completion of the Draft EA, a notice is sent to adjoining landowners, local newspapers, and other potentially affected interests, explaining the project and asking for input during a 21-day comment period which extends from October 22 through November 12, 1999. The Draft EA is also available to the public from the FWP addresses and phone numbers listed below and in the *Summary* section of this EA (p. 2), and through the State Bulletin Board System during the public comment period. No public meeting currently is planned; however, a meeting may be scheduled by FWP based on public request on a timely basis.

### **3. Duration of comment period if any: 21 days**

### **4. Name, title, address and phone number of the Person(s) Responsible for Preparing or Assisting with the EA:**

#### Fish, Wildlife & Parks

Terry Hill, Game Warden  
Fish, Wildlife & Parks, Region 4  
4600 Giant Springs Road  
Great Falls, Montana 59406  
Phone (406) 454-5840

Jim Williams, Wildlife Biologist  
Fish, Wildlife & Parks, Region 4  
4600 Giant Springs Road  
Great Falls, Montana 59406  
Phone (406) 454-5840

Tim Feldner, Enforcement Division  
Fish, Wildlife & Parks  
1420 E. Sixth Avenue  
Helena, Montana 59620

#### Maxim Technologies, Inc.

Daphne Digrindakis, Project Manager  
Doug Rogness, Hydrologist  
James Colgrove, GIS and Graphics  
Chris Cronin, Environmental Scientist

#### FaunaWest Wildlife Consultants

Craig Knowles, Wildlife Biologist





## APPENDIX A

### PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following required stipulation(s):

- (1) Inspect the exterior alternative livestock fence and document its condition on a weekly basis and immediately after events likely to damage the fence to insure its integrity with respect to trees, burrowing animals, predators and other game animals. Should ingress of wildlife and egress of alternative livestock during winter become a problem, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress.*
- (2) A guide or representative of the ranch must accompany each shooter to be sure shooting does not occur toward nearby residences (those located within approximately 1 mile of the enclosure).*



# PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

## DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES

NO

- |          |          |     |  |
|----------|----------|-----|--|
| <u>X</u> | _____    | 1.  | Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?   |
| _____    | <u>X</u> | 2.  | Does the action result in either a permanent or indefinite physical occupation of private property?  |
| _____    | <u>X</u> | 3.  | Does the action deprive the owner of all economically viable uses of the property?   |
| _____    | <u>X</u> | 4.  | Does the action deny a fundamental attribute of ownership?   |
| _____    | <u>X</u> | 5.  | Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is <b>NO</b> , skip questions 5a and 5b and continue with question 6.]                                |
| _____    | _____    | 5a. | Is there a reasonable, specific connection between the government requirement and legitimate state interests?  |
| _____    | _____    | 5b. | Is the government requirement roughly proportional to the impact of the proposed use of the property?  |
| _____    | <u>X</u> | 6.  | Does the action have a severe impact on the value of the property?   |
| _____    | <u>X</u> | 7.  | Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is <b>NO</b> , do not answer questions 7a-7c.] |
| _____    | _____    | 7a. | Is the impact of government action direct, peculiar, and significant?  |
| _____    | _____    | 7b. | Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?   |
| _____    | _____    | 7c. | Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?                               |

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

